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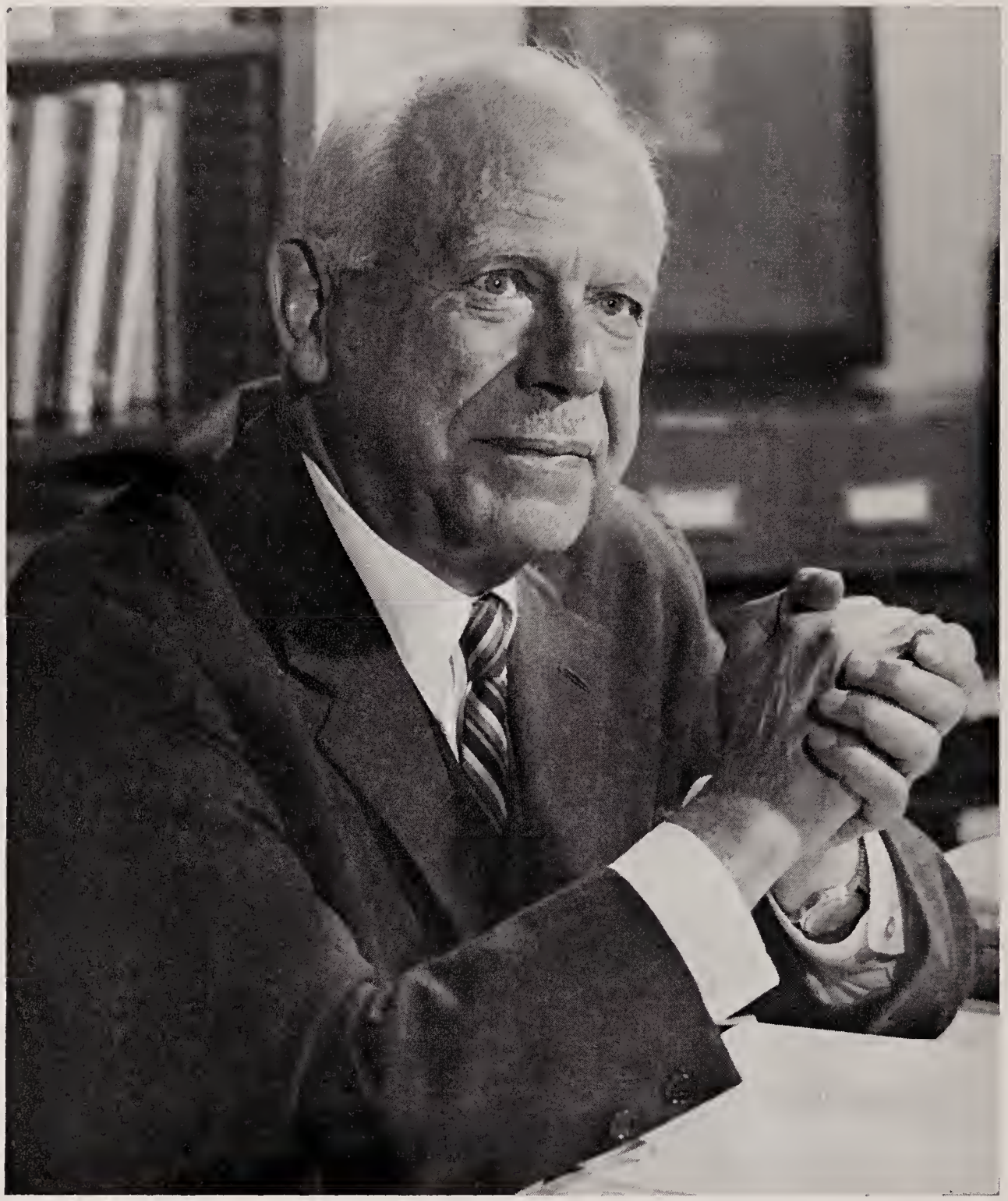
Class of 1965

The Harvard School of Public Health

Boston, Massachusetts

DEDICATION TO GORDON M. FAIR



Teacher and Investigator at Harvard University since September 1, 1918.

Member of the Faculty of Public Health, September 1, 1926 to June 30, 1965.

Gordon McKay Professor of Sanitary Engineering, September 1, 1935 to June 30, 1965.

Abbott and James Lawrence Professor of Engineering, March 1, 1938 to June 30, 1965.

International Statesman of Engineering and Public Health

FOR 47 generations of Harvard students, including 39 at the School of Public Health, Professor Gordon M. Fair, who retires this year from active teaching, may be remembered best as a brilliant, witty and poignant lecturer. Many of our own Class recall his lecture this year relating, in terms perhaps worthy of the late Cecil B. DeMille, how there was dancing in the streets when sweet water came to Boston and New York, and how the introduction of textile manufacturing in New England brought degradation of the atmosphere and of the human spirit. Some of us may be less aware of his other broad interests and his pioneering work in our field, and so we have reprinted here excerpts from the citation read to Professor Fair earlier this year by Dr. Thomas, during a testimonial in his honor given by the Faculty of Public Health:

"A VIEW of the career of Gordon Maskew Fair is a view of some of the most exciting and significant movements in the annals of engineering in public health.

"From his early research on water disinfection by ultraviolet light that followed completion of his training at Harvard and the Massachusetts Institute of Technology, until the present time, Professor Fair has been one of the ablest engineers in the service of his nation and his university.

"The development of his seminal concepts of the role of the engineer in public health, and his pathmaking work as an educator in implementation of these concepts mark outstanding achievements of his professional life. His scientific work has ranged from fundamental studies in limnology, the complex processes of water filtration, and the bio-degradation of organic wastes in streams, to the application of principles of physical chemistry and microbiology in the maturation of engineering practice in water and waste-water treatment. Among notable accomplishments was his leadership during World War II of a research group that solved difficult and important problems of water disinfection for military and civilian organizations.

"Professor Fair has long served as a statesman of engineering and public health in national and international agencies and in professional societies. In 1921—in the aftermath of World War I—he worked toward the restoration of public health facilities in the countries of middle Europe as Assistant Director of Sanitation for the League of Red Cross Societies. In 1942 and 1943 he organized the Engineering Section, Division of Health and Sanitation, of the Office of the Coordinator of Inter-American Affairs. These are two activities in a long list.

"One should also cite his sustained, skillful, and unsparing efforts for the Rockefeller Foundation and the World Health Organization in establishing centers for the education of sanitary engineers in the Americas and in Europe, Asia and Africa. In this work he guided and supported the careers of many former students who derive from an unbroken academic sequence of forty-seven classes at Harvard.

"His accurate predictions and insights have been a key to advance in the great venture of protecting the health of the public by control of man's environment."

In Appreciation: To Winthrop Laboratories

The successive classes of the Harvard School of Public Health have a friend in Winthrop Laboratories, who annually have sponsored our Yearbook, and this year the editors have asked Winthrop to tell us something about their activities, which bear so directly on the field of public health. The following article and photos were provided to us by Winthrop, and we are pleased to reprint them here:

Pioneer in Anti-Malarial Research

WINTHROP Laboratories, the pharmaceutical manufacturing division of Sterling Drug Inc., has made a considerable number of substantial chemotherapeutic contributions to the treatment and cure of disease in this country and abroad.

Perhaps its most significant accomplishment in terms of public health has been the pioneering role it has played for some 30 years in the field of antimalarial drugs. While malaria may be of relatively minor concern in the United States today, many thousands of American servicemen in World War II learned at close hand about the disease. At the same time they became very familiar with Winthrop's Atabrine, the drug produced as a substitute for quinine which was no longer available.

In 1944, Winthrop scientists developed a com pound called Aralen which proved to be even

Eleven-day old embryonating eggs being innoculated with various strains of influenza virus in producing Winvac, Winthrop Laboratories' influenza vaccine, at Rensselaer, N. Y.

THE STERLING-WINTHROP RESEARCH INSTITUTE, RENSSELAER, N. Y., research center for Sterling Drug Inc. and its domestic and foreign divisions and subsidiaries, including Winthrop Laboratories.

more useful in treating what remains as the world's most widespread disease. A still more effective agent, Plaquenil, has since been discovered. Curiously, in one of medical science's recurring research phenomena, Plaquenil has been found to be valuable also in the treatment of rheumatoid arthritis and related collagen diseases.

Forward strides are being made at the Sterling-Winthrop Research Institute in developing chemotherapeutic weapons to treat more effectively other world-wide diseases. One such, schistosomiasis—or bilharziasis—ranks next to malaria as the world's most prevalent affliction.

Winthrop is also an active participant in the pharmaceutical industry's intensive research program to perfect vaccines in the fight against measles, influenza and other viral diseases. Towards that end, the company has vastly expanded its research facilities and staff of scientists at Rensslaer, N. Y.

Thanks to Winthrop's antibacterial skin cleansing agent, pHisoHex, much progress has been made in coping with the difficult problem of bacterial cross-infection in U. S. hospitals. First adopted by operating-room personnel as a soap replacement, the compound is now widely used on surgical patients, in nurseries and by mothers of newborn infants to bathe their babies.

Although not yet available to the medical profession, a new Winthrop compound has exciting possibilities in the field of public health. Fve years of study have shown it to be a non-addicting analgesic in the morphine range of potency that is safe for physicians to prescribe. Talwin, as the new drug is called, holds out high hopes in society's war against narcotic addiction.

"It Is Commencement—The Beginning of a New Era for All of Us"

PRESIDENTIAL MESSAGE

By GEORGE ADEYEMI ADEMOLA

THURSDAY, 17th June 1965, is scheduled to see the disintegration of a unique phenomenon. In September, 1964, a strange conglomeration of human types gathered in the Shattuck Street building. Caucasian and Negro, Arab and Jew; nuclear physicist and sociologist, surgeon and engineer, astronaut and veterinarian, government administrator and Peace Corps volunteer; from Chile and Canada, New Zealand and Korea, Norway and

Thailand, Haiti and Pakistan and every region of the U.S.A. Within months, by some strange alchemy of proximity and interest, this combination of discrete elements has become a single entity—The Class of '65.

Perhaps the strongest single welding influence has been shared work—in class periods and evening discussions, sessions for questions and examination post-mortems, each of us helping another to keep his head above stream in the surging flood of required study. The wide choice of courses provided several cross-mixtures, stirred and differently settled on exploratory field trips. Further blends were made possible by the various committees. With interests always changing but always shared, in a constantly shifting pattern of exchange, we learned to know each other and to make full use of School facilities and our combined experiences.

Highlighted in retrospect are social activities: picnics bright with the flaming leaves of autumn or the sparkle of winter snow; games of squash and table tennis; the warmth of Thanksgiving; the joys of Christmas; the excitement of Nigeria night; the delicacies of Oriental cooking; musical evenings at home or with the Boston Symphony; informal coffee hours and outside lectures; congenial visits in Faculty homes or student apartments.

We have all had our share of personal problems—disappointing grades or malevolent viruses, mental conflicts or physical accidents. These have served to illuminate the permeating characteristics of School and House—a deep caring for the needs of the individual and a readiness to consult the interests of all. The Dean's world tour of investigation; the formation of the Curriculum Committee; the private tutorials; Class meetings and House meetings; the observant awareness of the House Director; arrangements for domestic help; messages, gifts and visits to the sick; scholarships awarded for continued study—in so many ways has this depth of feeling been manifested, a valid expression of the comprehensive significance of

"BY SOME STRANGE ALCHEMY . . . A SINGLE ENTITY"
Class members, relatives, and guests, at the Christmas party.

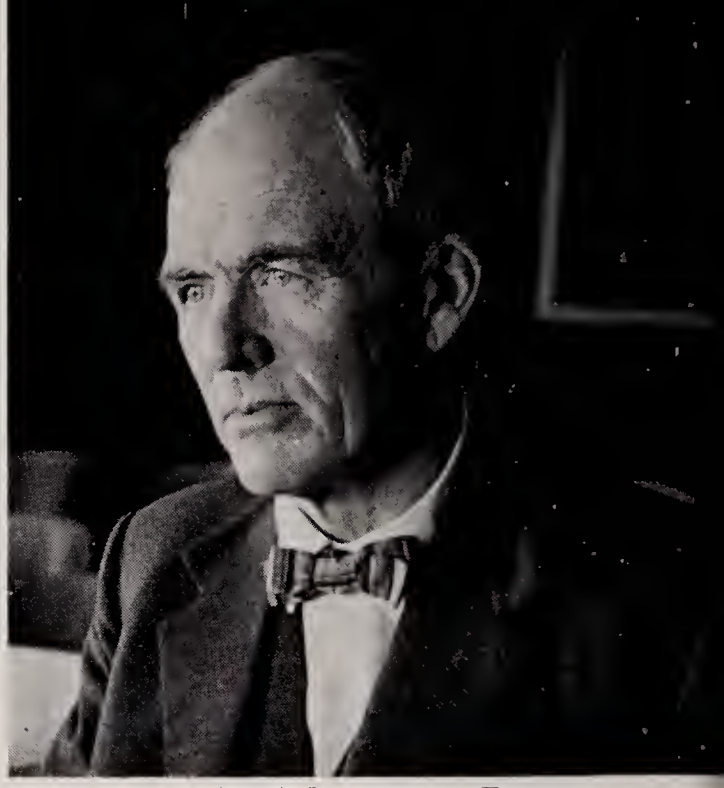
Public Health.

This of course is the philosopher's stone that has worked our transformation. We are involved in a field that most fully exemplifies the integration of mind, body and spirit. No human activity lies outside our interest. Thus we can appreciate the privilege of having spent this momentous year in the U.S.A. The Presidential elections; action in Vietnam; payment at the UN; relations with Europe; the Congo airlift; Medicare; the Anti-Poverty programme; Civil Rights—what better practical study could we have had of the problems facing a modern democracy? What better example of the interaction of physical, mental and spiritual influences?

In a short time now, we shall take leave of one another and return to our various sectors on—or above—the earth's surface. Yet June 17th, which marks our leavetaking, is not an end. It is Commencement—the beginning of a new era for all of us, in which we shall apply to our several tasks in our various countries the broader perspectives and deeper understanding that will be our lasting memorial of the Class of '65. May we persevere in working as a team for the welfare of the world's people.

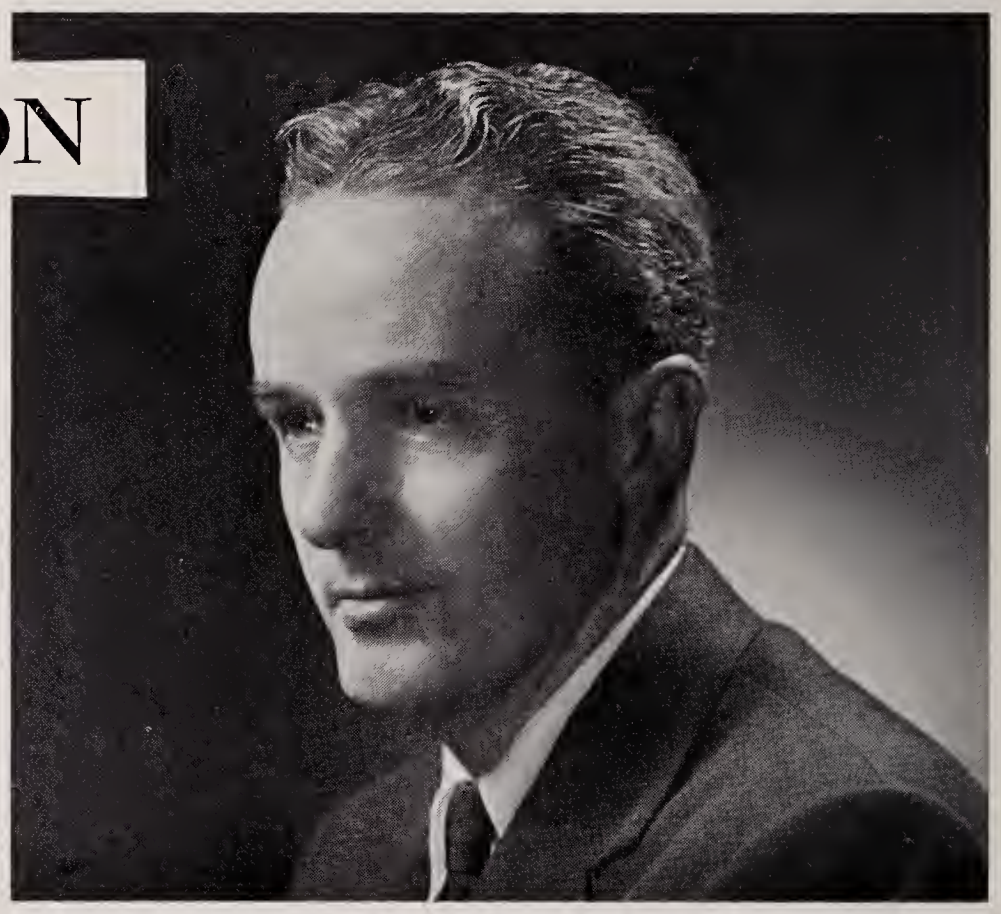
"NO HUMAN ACTIVITY LIES OUTSIDE OUR INTEREST" — Class members and wives inspect Health Center in Puerto Rico.

Dr. James L. Whittenberger
Assistant Dean



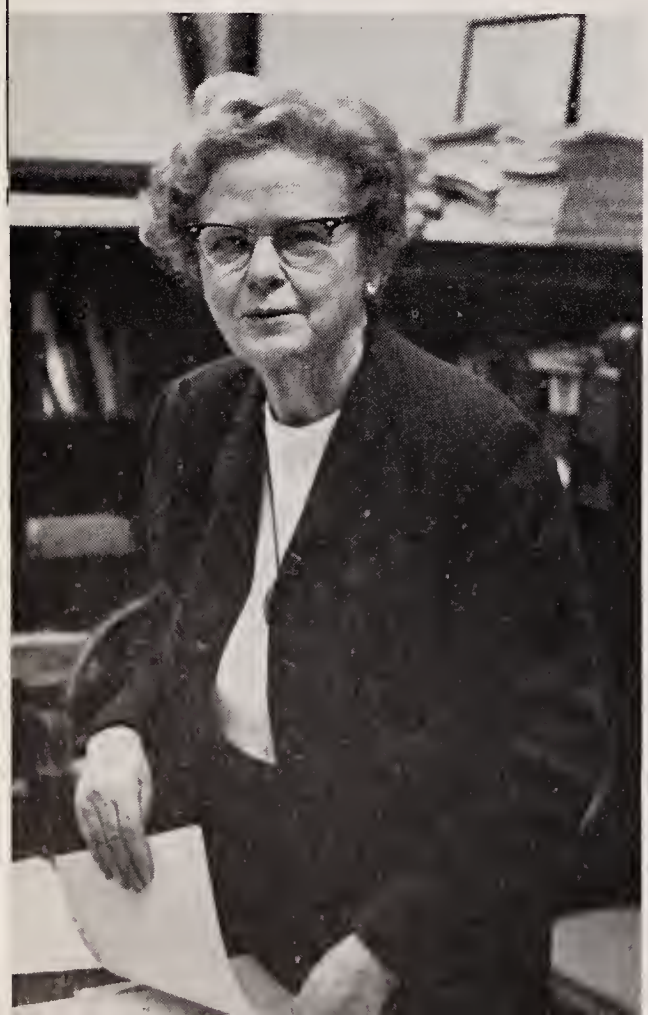
Dr. William H. Forbes
Assistant to the Dean and Faculty Advisor for Foreign Students

ADMINISTRATION



Dr. John C. Snyder
Dean

Mrs. Margaret G. Barnaby
Administrative Assistant to the Dean



Mr. Roger B. Spaulding
Assistant to the Dean

Mr. William L. Claff
Administrative Assistant to the Dean

Mr. Ralph T. Esterquist
Librarian, Schools of Medicine, Dental Medicine, and Public Health

Dr. Donald A. Tucker
Director, Medical Area Health Service

Left to right—Marilyn Lunch, Jean Haley, Irene Huber, Margaret Penrose, Irene Forbes, William Claff, Margaret Barnaby, Richard Daggy, John Snyder, Roger Spaulding, James Whittenberger, Colette Farragher, Beverly Laskey, Gail Stocker, Betty Ann Stephens, Judy Godden, Judy Grossman.

Mrs. Margaret D. Penrose
Administrative Assistant to the Dean

Miss Beverly Laskey
Registrar

INNOVATIONS IN EDUCATION

By JOHN C. SNYDER, M.D.

Dean of the School of Public Health

In October at the annual meeting of the American Public Health Association, I was invited to give the Delta Omega address on the subject, "The Education of Health Experts for the 1970's." The paper will be published in the American Journal of Public Health *later this year. Since part of the talk dealt with some general aspects of education and since the Class of 1965 has shown keen interest in the current review of the School's curriculum, I offer herewith some excerpts from the Delta Omega address for inclusion in the* Yearbook.

"It can be noted with considerable satisfaction that the quality of the collegiate and professional education received by the men and women who are now arriving for matriculation in schools of public health is generally superior to that of two decades ago. As in the past there are a few truly excellent students at the top of each new group, but the important change is that the group as a whole is better prepared today than was the case two decades ago. This is a tribute to the colleges and universities which have upgraded requirements, standards of performance and quality of instruction. Schools of public health must now move in the same direction, and without delay. This conclusion is reached even more decisively from another viewpoint.

"The rate of change in many matters affecting our lives is increasing almost exponentially. A moment of reflection is enough to evoke deep concern over the increasing complexities of urban life and the flood of technological advances now affecting the highly industralized societies. These changes will soon impinge upon the new nations which are determined to leap into advanced economic status in a decade or less. But of particular relevance is the extraordinary increase in the amount of knowledge which is literally flooding the libraries. In 1941 approximately 500 journals arrived in the major medical libraries of this country, journals dealing with the sciences directly contributing to medicine and public health. In 1965 the number will be at least 2,500, an increase of fivefold in this short span.[1] The National Library of Medicine expects to receive 16,000 journal issues this year, with a total number of articles related to the health sciences numbering approximately 160,000.[2] Zinsser has analyzed certain phases of the impact of technology on medicine.[3] He notes that there are approximately 2,000 diseases with which every physician should be thoroughly familiar; furthermore, that there are 90,000 items of factual information currently being taught in an American medical school. In his opinion 'this number should be increased by a factor of five to encompass the actual bits of information likely to be present, concealed beneath these titles and subheadings' (3, p. 917). Whether the total number is 90,000 or 450,000, the mass of facts being presented to the medical student is awesome indeed.

"These are the figures of today—several multiples larger than the figures of two decades ago. If data were available for the health sciences other than medicine, I think there would be similarly striking increases in the volume of information. In the foreseeable future it is probable that the rate of accumulation of new knowledge will continue to accelerate. Unless the length of time allotted for the education of practitioners, teachers and research personnel is greatly extended, which seems neither feasible nor acceptable, the conclusion is inescapable that the educational process

itself must be vastly improved. Otherwise the health sciences and professions will fall far behind their potential for public service in the future. The danger is real, and is clearly described by John Gardner in his book 'Self Renewal: The Individual and the Innovative Society.'

" 'We are witnessing changes so profound and far reaching that the mind can hardly grasp all the implications . . . A society that has reached heights of excellence may already be caught in the rigidities that will bring it down. An institution may hold itself to the highest standards and yet already be entombed in the complacency that will eventually spell its decline . . . Unless we foster versatile, innovative, and self-renewing men and women, all the ingenious social arrangements in the world will not help us.' (4, pp. xiii-xvi).

"To Make the Curricula . . . More Challenging"

"In my opinion, it is the responsibility of policy makers in education for the health professions (a) to accept the fact that many facets of contemporary systems of instruction are outmoded and inadequate; (b) to concentrate their best resources and their wisest minds on an intensive search for more effective educational technics; and (c) to have the courage to experiment even though some of the experiments may be failures. Again, Gardner has stated this succinctly:

" 'We pay a heavy price for our fear of failure. It is a powerful obstacle to growth. It . . . prevents exploration and experimentation. There is no learning without some difficulty and fumbling. If you want to keep on learning you must keep on risking failure—all your life.' (4, p. 15) 'An organization may avoid experimental ventures because it fears to damage its reputation for soundness . . . Many an established specialist fears the loss of his reputation if he ventures beyond the territory where he has proved his mastery. Indeed this fear is the greatest obstacle to intellectual breadth in the scholarly world.' (4, p. 52)

"It is my conviction that the intellectual challenge of careers in public health should be presented more clearly to the students in our colleges and universities. Dr. Weller in his essay on 'Questions of Priority'[5] gave emphasis to this point:

" 'There is little general appreciation of the breadth, vitality and social significance of modern public health—or of the intellectual stimulus inherent in a rapidly evolving process of synthesis and integration of knowledge wherein medicine and the biologic sciences, the social sciences and the physical sciences meld for the benefit of man.'

The schools of public health will accomplish two purposes if they move swiftly now to make their curricula more effective and more challenging to the able and well-prepared university graduates: they will attract the men and women who are gifted in administration, policy formation, education, and research; and in the process they will also attract the innovators who are citizens of crucial importance to our future."

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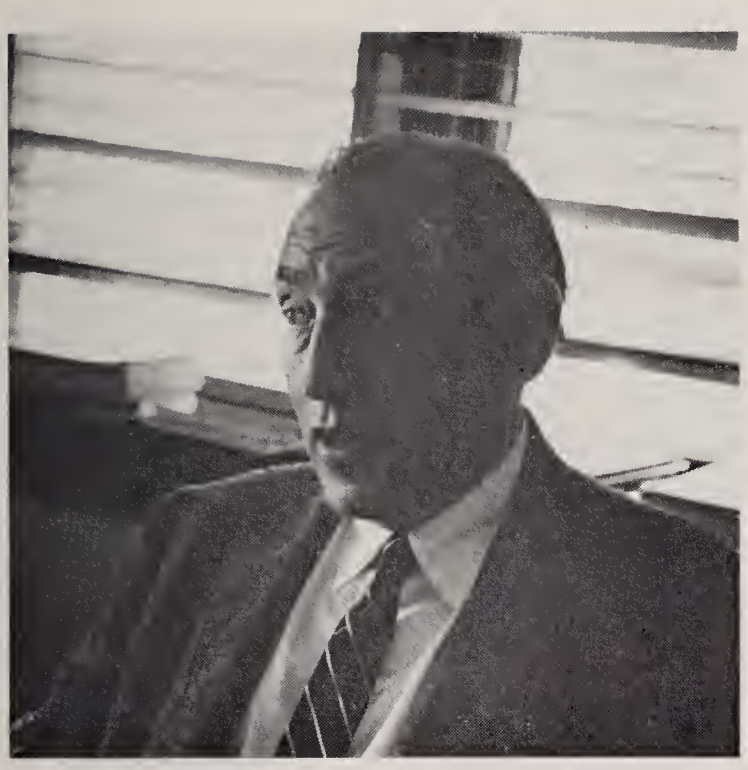
2. Rogers, F. B., "The Medlars Story," U. S. Dept. H. E. W., p. 4, 1963. U. S. Government Printing Office.

3. Zinsser, H. H., The Impact of New Technology on Medicine. Trans. N. Y. Acad. Sci. Ser. II, *26:*914-22, 1964.

4. Gardner, John W., "Self Renewal: The Individual and the Innovative Society." Harper and Row, New York, 1963, 1964.

5. Weller, T. H., Questions of Priority. New Eng. J. Med. *269:*673-678, 1963.

MATERNAL AND CHILD HEALTH



DR. WILLIAM M. SCHMIDT, *Chairman*

That Word..."Health"

From time to time people have questioned the validity of the traditional term, "Maternal and Child Health." A broader interest is indicated by such things as the "Family Health Study," which was conducted by Dr. Stuart, and other interests of this Department, such as the Study of Children of Hospitalized Parents, and the longitudinal studies of health and development which are now being focused on young adults.

Perhaps MCH is too limiting a designation despite the tradition. Even the "H" for Health* in MCH is open to criticism since the preservation of health is pretty much a matter of attempts to prevent illness or injury or to mitigate their consequences in children. This is obvious in underdeveloped countries and in rural and urban slums in the U.S.A., and is the object of study by the department in research efforts in Boston and the surrounding area.

Left to right—Dr. Derek Robinson, Dr. Leon Sternfeld, Miss Elizabeth Rice, Miss Olivia Brum, Dr. Benjamin Sachs, Mrs. Ruth Cowin, Miss Helen Cohn, Miss Margaret Carney, Mrs. Grace Cruickshank, Dr. William M. Schmidt, and Dr. Isabelle Valadian.

CHILDREN'S RESEARCH PROJECT
Standing—Mrs. Phyllis Paskauskas, Dr. Leo Miller, Mrs. Charlyne Costin. *Sitting*—Mrs. Elinann Reynolds, Dr. Sylvia Krakow, Miss Miriam Ekdahl.

Maternal and Child Health is usually the first of the personal health services to be introduced in countries developing their health programs, and the study of these programs in Puerto Rico is part of the curriculum designed to improve student understanding of the problems of their establishment. Further, it is still a major part of the health services in any health department in this country because of the need to reduce maternal morality, infant mortality, and the conditions leading to handicaps, as well as to provide, in cooperation with other public and volutary agencies, coordination of services.

The full- and part-time faculty and staff include individuals from the fields of pediatrics, obstetrics, family planning, social work, and nursing, so that consideration may be given to various aspects of deterrents to health within the large groups of the population with which the department is concerned.

DR. WILLIAM M. SCHMIDT

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* "That Damned Word Health," I. Gordon, *Lancet* 2:638-693, Sept. 20, 1958.

STUDENTS, DEPARTMENT MEMBERS AND HEALTH OFFICIALS IN PUERTO RICO

BIOSTATISTICS

The Age of The Computer

ROBERT B. REED, *Chairman*

THE Department of Biostatistics has the perennial pleasure of coming in close contact with practically all of the students at the School. We are, of course, aware of the fact that this pleasure is at times one-sided and that whereas E. T. Bell has identified mathematics as both the Queen of the Sciences and the Hand-maiden of the Sciences, there exists a school of thought that considers biostatistics to be the Necessary Evil of Public Health.

Perhaps the advent of the computer age will make biostatistics more palatable. There is no doubt that modern computers are of almost inconceivable assistance in coping with the necessary evils of tedious and complex statistical manipulation. However, the output of a reasonably active computer is a continuous reminder of the classic principle of public health that statistics are like garbage—once you have collected them, you must decide what to do with them. And the disposal problem is increasing by leaps and bounds.

The impact of the computers on biostatistics is, in a sense, only one part of the information explosion that is being felt throughout all of science. For the student of biostatistics, it means two things. On the one hand, the mechanics of processing masses of records and numbers is becoming increasingly more rapid and efficient. Simultaneously, this processing is becoming the concern of

In the window below are Raymond Neff, Carol Leonard, Dr. David Heer, Linda Parrish, and Margaret Drolette.

In the window below are Claire Wasserboehr, Margaret Holt, Judith Shapiro, Dr. Jane Worcester, Dr. Jacob Feldman, and Dr. Lenin Baler.

Three Biostat students, and friend.

computer specialists rather than the direct concern of the scientist who uses the statistics. In this way, the work of biostatistics is being simplified.

It is even conceivable that at some time in the dim, distant future students in Biostatistics lab will never calculate a standard deviation. Instead, they will learn what a standard deviation is intended to measure and that there are machines that will produce values of the standard deviation from sets of data.

On the other hand, the same computers that are relieving the scientist of the burdens of data processing are presenting him with the need to develop increasing sophistication in the utilization of complex masses of material. In the past, the analysis of public health problems has been conveniently limited by practical restrictions on the amount of information available and the extent to which it could be analyzed. In the future, the comparative ease with which data can be collected and processed will require increased clarity in the formulation of problems and corresponding selectivity in the utilization of statistics.

Dr. Robert B. Reed

Advanced Biostatistics class students (below) listen to Dr. Worcester (right) give one of her painstakingly prepared lectures on the mysteries of the chi-square.

PUBLIC HEALTH PRACTICE

New Types of Leadership

ROBERT H. HAMLIN, *Chairman*

EFFECTIVENESS in public health today requires far more than technical health training alone. New types of leadership are required—involving men and women with knowledge of the political, social and economis aspects of health and with the ability to work effectively at the critical centers of decision in problem areas.

My central concern, and that of my colleagues in the Department of Public Health Practice, is to provide the training—through curriculum and teaching programs—and the new knowledge—through research—necessary to develop such widely skilled leaders.

A review of some of our departmental research activities illustrates the point. We are deeply engaged in studies of the problems of national health planning, particularly in developing countries and examination of social, educational and economic consequences of the utilization of health services in Tunisia, studies of sociocultural factors in the origin of—and in recovery from—

Below—Dr. H. Jack Geiger, Miss Marjorie A. C. Young, Dr. Hamlin, Miss Beryl C. Magee and Dr. Arnold I. Kisch confer on curriculum matters.

Catherine Hayes, Kathleen Forman, Helen McGrath, Agnes Erickson, Margaret Salmon, Jacqueline Felix, Nancy Richardson, Katherine Fitzpatrick.

coronary heart disease, and exploration of patterns of referral among practicing physicians in New England are under investigation. A major effort during the past year has been the design and implementation of a plan to merge Boston City Hospital and the Boston Health Department into a new and uniquely integrated municipal health service.

These efforts will, we hope, not only yield new knowledge but also keep our curriculum fresh and realistic in our attempts to develop the public health leaders of the future.

Dr. Robert H. Hamlin

Dr. Roy Penchansky and Miss Beryl Magee prepare a case study.

The Social Science Program

Zifre Lurie, Thelma Shapiro, Dr. Norman Scotch, Joyce Hartweg, Dr. Sol Levine, Dr. Sydney Croog, Helen Odence, Dorothy Bawden.

THE Social Science program tries to inform physicians and other public health professionals about the social and cultural aspects of health and illness, as well as conveying a basis for familiarity with the methods used by the social scientist. Members of the Unit, using the disciplines of anthropology, sociology, and psychology, are studying problems which affect the success of health programs anywhere in the world, as well as making contributions to basic social science methodology and theory.

DR. JAMES E. TEELE, a sociologist, is studying the problems of juvenile delinquents in a Boston suburb.

DR. NORMAN SCOTCH *(left)* studies local medical customs and practices among the Zulus. With him, below, are two specialists in Internal Medicine.

EPIDEMIOLOGY

Standing—Dr. Theodor Abelin, Dr. Manning Feinleib, Diane Wesclowski, Kathleen Shreeve, Dr. Marvin Glasser, Dr. George Hutchison, Dr. Samuel McClellan, Dr. Ascher Segall. *Seated*—Mrs. Eva Shuman, Mrs. Marguerita Zalkalns, Rose Michelson, Mrs. Charlotte Casler, Dr. Eva J. Salber.

Chronic Diseases Studied

DR. BRIAN MACMAHON, *Chairman*

DURING the past seven years the program of the Epidemiology Department has been heavily weighted toward investigations in the chronic diseases. It is chiefly in these areas where fundamental questions of disease etiology remain to be solved.

A series of studies currently under way or recently completed have been concerned with the role of ionizing radiation as a disease producing agent and particularly as a carcinogenic factor. These investigations include studies of small doses of radiation such as are involved in background exposure and in diagnostic x-ray of fetuses in utero. They include studies of very high doses of radiation used in therapy and studies of the intermediate radiation levels to which certain groups are occupationally exposed.

Ionizing radiation is also one of the variables of interest in a series of clinical trials, concerned with use of these radiations in controlling disease.

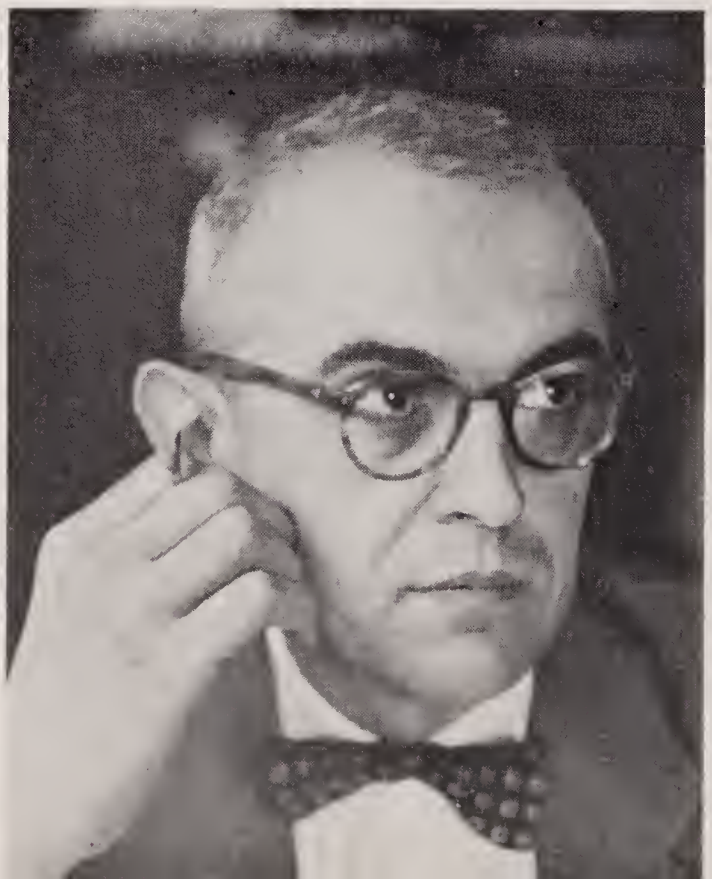
Photograph of a meeting of Investigators in the International Study of Breast Cancer and Lactation, Geneva, August, 1964. Dr. Brian MacMahon is presiding, with Dr. Eva J. Salber at his right. Dr. Manning Feinleib is at the left.

Other areas in which the Department is working include studies of the association of lactation with breast cancer, of smoking with lung cancer, and of a variety of factors as they are associated with psychotic diseases.

Many of the candidates for the Masters' degrees will be directly involved in some of these disease areas. But all will be involved in the evaluation of evidence developed in one or another area of Public Health.

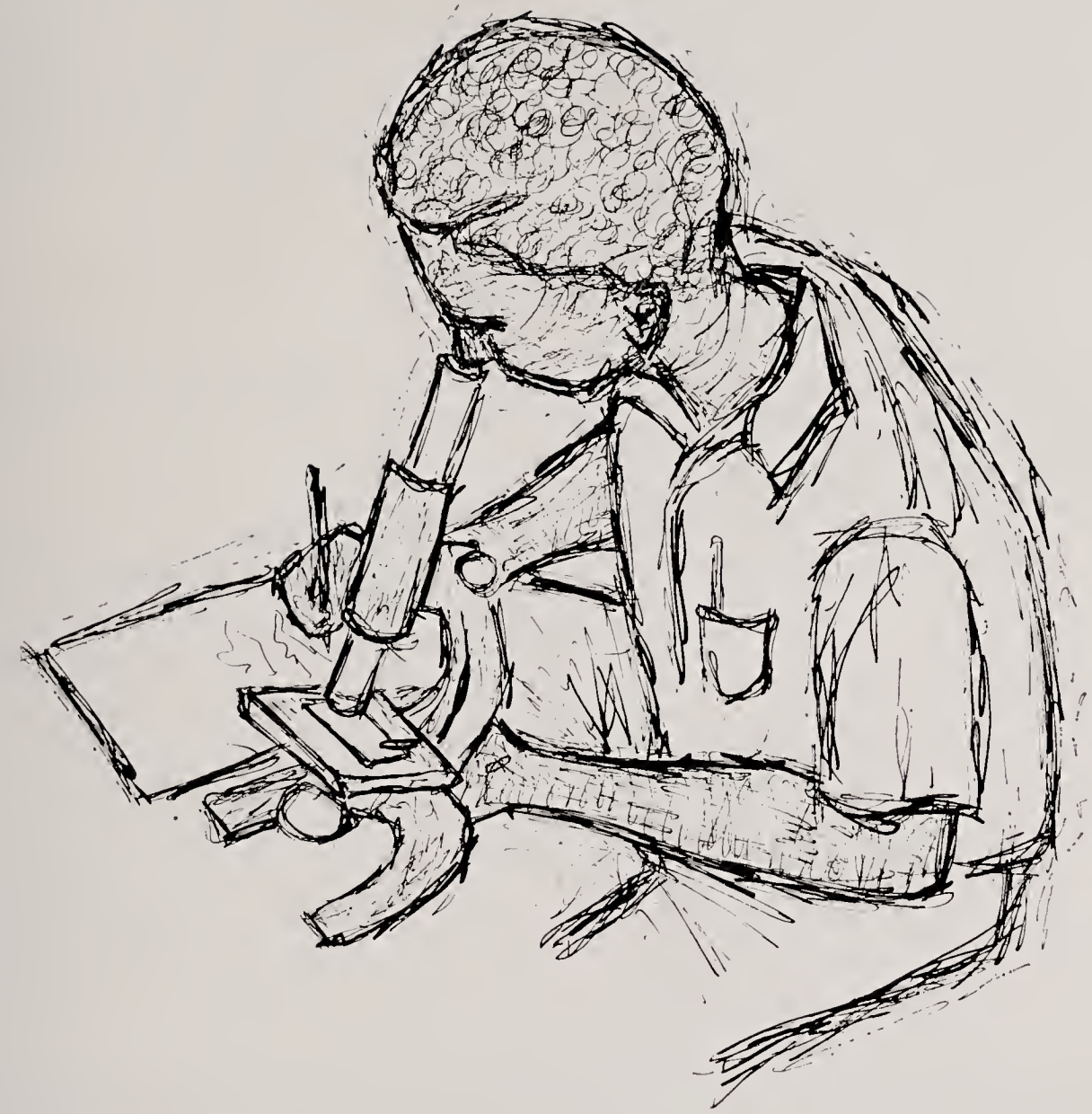
In the first course in Epidemiology, which is taken by all students, the chief interest is in methods for evaluation of evidence. The classical epidemiologic studies that are now history and the current epidemiologic studies, in which we are involved, serve as the illustrations of these methods.

DR. GEORGE B. HUTCHINSON,
Acting Chairman



Left—Dr. Thomas F. Pugh

Below—Dr. Speidel and Dr. Drolte, students at the School, evaluate data in the Epidemiology Laboratory.



MICROBIOLOGY

Research Programs Around the World

DR. HERBERT L. LEY, *Chairman*

THE Department of Microbiology shares with the Departments of Tropical Public Health and Epidemiology instruction in infectious diseases. Emphasis is placed on the ecology and epidemiology of the bacterial, mycotic, viral and rickettsial diseases of man. The Department is also engaged in a wide variety of research programs both at Harvard and at field sites as diverse as Saudi Arabia, Lebanon, Yugoslavia, Portugal and Arizona.

Drs. Snyder, Murray, Bell and Nichols conduct trachoma research sponsored by the Arabian American Oil Company and the Public Health Service. Drs. Murray and Vinson are engaged in studies of epidemic typhus and trench fever under the aegis of the Armed Forces Epidemiological Board. Dr. Chang studies the intimate relationships of human cells and viral agents which cause cell injury or aging in subtle ways. Miss

Front row—Mrs. Jacqueline Livingston, Miss Alice Morse, Miss Mary Ann McNichol, Miss Irene Petritsi, Mr. E. Mario Zipilivan. *Second row*—Miss Clare Conover, Miss Charlotte Campbell, Miss Linda Ambrosini, Mrs. Jane O'Connor, Dr. Samuel D. Bell, Jr., Mrs. Lesley Daniels, Dr. John Peters, Dr. Kenneth Girard, Dr. Robert Chang. *Third row*—Miss Frances Radcliffe, Mrs. G. Cornil, Dr. F. Daguillard, Dr. Thomas Boyd, Dr. Edward Murray, Dr. Herbert Ley, Jr. *Fourth row*—Dr. Justin Conrad, Miss Gertrude Green, Dr. Geoffrey Edsall, Dr. J. William Vinson, Dr. Robert MacCready, Dr. Harry Ashe.

After this photograph was taken, Dr. Page was succeeded by Dr. Richard H. Daggy, who recently resigned as Medical Director of Aramco to join the Faculty of Public Health at Harvard as Assistant Dean for International Programs. The present Associate Director of the trachoma research program in Aramco's Medical Department is Dr. Roger L. Nichols.

Dr. Roger L. Nichols, assisted by a nurse, Mehedi Hassan, prepares to vaccinate a young Saudi Arabian.

Dr. Samuel D. Bell, Jr., and Dr. Nadine A. Haddad look for the first signs of trachoma.

Above—Dr. John C. Snyder and Dr. Robert C. Page at the Aramco Health Center in Dhahran. Dr. Snyder is director and Dr. Page is associate director of the Aramco Trachoma Research Program.

Campbell's research is in the mycotic agents of disease. Dr. Ley has conducted tetanus studies at the Massachusetts Institute of Laboratories and begun work with scrub typhus at the School. Our new member, Dr. John Peters, represents the field of immuno-chemistry.

Dr. Edsall, Superintendent of the Institute of Laboratories of the Massachusetts Department of Public Health and a member of the Department staff, is engaged in research programs in immunization which bridge and areas of basic and applied research as well as international consultation. Several members of the Institute staff hold part-time appointments in the Department and participate in the teaching program.

The Department has slightly modified its curriculum to emphasize the epidemiologic and ecologic aspects of infectious disease to more nearly match the problems encountered in practical situations in public health here and abroad.

Dr. Herbert L. Ley

Right—Dr. Geoffrey Edsall is shown presiding at an international meeting of immunologists.

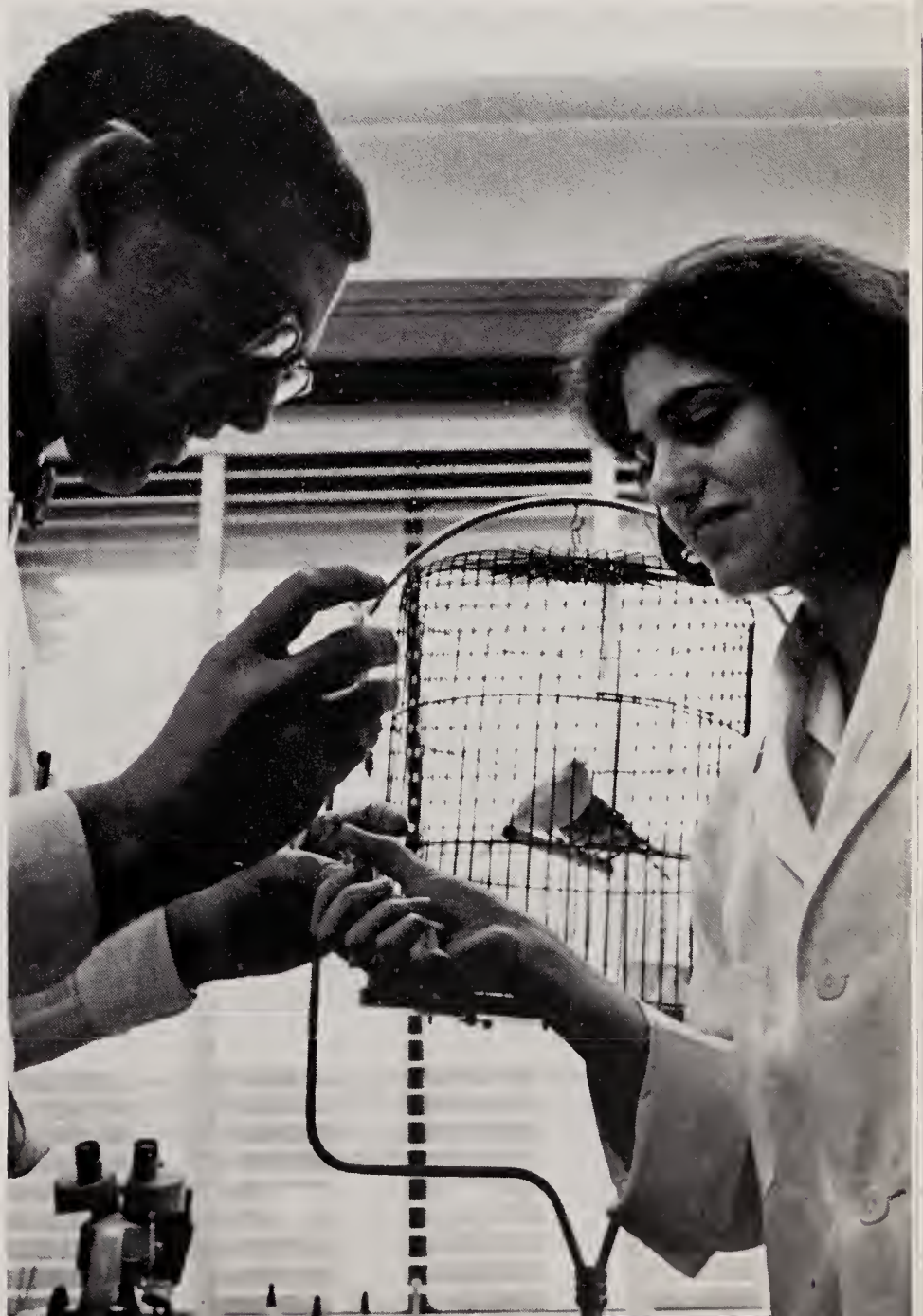
TROPICAL PUBLIC HEALTH

Dr. Thomas H. Weller, *Chairman*

New Knowledge Unmasks New Hazards

THE interaction between man and his pathogens is a continuing and constantly changing process. Old problems reappear and new knowledge unmasks new hazards produced by the infectious diseases. Thus the Department of Tropical Public Health is ever faced with the need for a continuing re-evaluation of its teaching and research activities. For example, the problems of insecticide-resistance and the appearance of strains of plasmodia that fail to respond to synthetic anti-malarial drugs, indicate the continuing importance of malaria as a global health problem. The Department, therefore, is considering an expansion of teaching and research in the area of malariology. Another example is found in the results of recent work in the Department showing that the infant infected *in utero* with rubella virus or cytomegalovirus may excrete virus into the environment after birth. This observation necessitates a revision of our thinking concerning the epidemiology of these diseases—and possibly of other clinical entities of viral etiology.

Below—Dr. Andrew Spielman studies avian parasites to obtain information about malaria in man. He is assisted by Valerie Skaff.



Robert J. M. Wilson, Edward H. Michelson, Steve C. Pan, and Thomas E. Frothingham compare two snails, vectors of schistosomiasis, an important health problem in many parts of the world.

The Department is actively engaged in planning for new quarters in the new Center for the Prevention of Infectious Diseases. Much needed new space will then permit expansion of our long-term research effort on the control of schistosomiasis, an increasing problem with the progressive introduction of irrigation schemes in the semi-arid regions. Informal liaison arrangements have been established with several research groups located in endemic areas of schistosomiasis which should prove mutually profitable.

Our consultant activities in the developing areas of the world hace emphasized the fallacies inherent in the transposition thereto in an unmodified form of our own pattern of medical education. It is the continuing responsibility of those in the public health field to assist in the design of medical curricula planned specifically to meet the piorities of the developing regions. In such areas the philosophy and practice of public health needs to be firmly integrated within the customary academic framework of curative medicine. It is unnecessary to point out that members of the Class of 1965 have a unique opportunity to concern themselves with medical education in the developing areas and to thereby beneficially influence the welfare of mankind.

DR. THOMAS H. WELLER

Andrew Spielman, Charles A. Alford, Jr., Mrs. Claire Butler, Eli Chernin, Thomas H. Weller, Joseph W. Burnett, Thomas E. Frothingham, Steve C. Pan, Edward H. Michelson.

DEMOGRAPHY

Front—Dorothy Greenidge, Tilly Teixeira, Joan Reid, Judith Bryden. *Back*—Dr. John Wyon, Dr. David Heer, Stephen Finner, Dr. Stephen Plank, Prof. Harold Thomas, Vivienne Burden.

Too Many People?

AS public health measures have been successfully introduced into the nations of the world the effects upon mortality rates have been striking, but the decline in birth rates has not proceeded concommitantly. Many scholars have become convinced that unless the two rates can be aligned, population densities of such magnitudes will be generated that economic and social advancement will be seriously hampered in many areas of the world.

The Department of Demography and Human Ecology is vitally concerned with advancing our knowledge of the determinants of density and quality of populations. These studies have proceeded on many fronts. For 12 years Dr. John Wyon has been concerned with intensive studies in India of these interrelationships. During this year programs in Latin America and the Near East have also benefited from cooperation with members of the department. A wide range of observational and experimental research has been carried on.

In the future a broad scale approach will continue with areas of involvement running the gamut from the cellular level to consideration of how communities can advance their goals in education, economic development, and health to ecological consideration of man's total biophysical and social environment. These objectives are being pursued by a multi-disciplinary faculty working in close cooperation with the newly formed University-wide Center for Population Studies.

Dr. John B. Wyon and Dr. Carl E. Taylor at a conference with village elders in the Punjab.

The Growth of Human Populations

The new Center for Population Studies has been launched this year, enjoying a close co-operative relationship with the Department of Demography and Human Ecology. Dr. Roger Revelle, Director, and Richard Saltonstall Professor of Population Policy, describes the goals of the Center in the years ahead.

Dr. Revelle in Pakistan village.

WE can think of the earth as a space ship on an endless voyage, with a passenger list of many species of living creatures. The number of individuals in one species, *homo sapiens,* has suddenly begun to grow very rapidly; they threaten to overrun the living space on the ship and to use up all the supplies. Because of the short life span of the members of the species, they cannot tell what the ultimate consequences of their own increase will be. But they can see that the rate of growth in their population is seriously disturbing the balance of life, and is spreading misery and privation among ever larger numbers of human beings. A good many of the passengers have decided that for their own health and welfare, and that of their children, they must find ways to slow down their growth in numbers.

The Center of Population Studies is being developed to try to help in this task in three ways: through research; through teaching; and through public service. The research must cover a wide spectrum, from the physiology of human reproduction to the meaning of moral and spiritual values in family life, from the economic factors affecting the age of marriage in an industrial society to the problems of introducing innovation in a traditional culture.

In its teaching, the Center will be largely concerned with the role of public health, not only in developing national population policies, but in helping individual men and women to have the number of children they want at the times they want them.

As part of its public service activities, the Center will organize and carry out field projects in different parts of the world where it will be possible to combine learning and teaching with action.

The development of the Center for Population Studies will take time and money and hard work. But above all, it will require ideas—ideas about the future, and about the ways in which knowledge in many different fields can be brought to bear on the problem of the unprecedented growth of human populations in our time.

DR. ROGER REVELLE

Trudy Greene, Mary Curran, Pauline Wyckoff, and Wilma Winters.

NUTRITION

Nutrition Studied in Newton and Nigeria

Dr. Fredrick J. Stare, *Chairman*

THE Department of Nutrition was saddened by the death this past January of one of its senior and most popular members, Dr. Martha F. Trulson, Associate Professor of Nutrition. She is missed by all her colleagues.

New research instituted this year includes a study of the treatment and prevention of obesity in adolescence and a survey of the nutritional status of school children in grades five through seven in two schools in an economically underprivileged area of Boston. The first study is under the direction of Dr. Jean Mayer and Dr. Carl Seltzer and is being done in the public schools of Newton. The latter study is to provide factual data for Boston Redevelopment Activities and to develop methods that may be useful in the implementation of President Johnson's Anti-Poverty Program.

International activities continue to be an important part of the total program of the department. This year these were concentrated at the University of Antioquia School of Medicine, Medellin, Colombia. They involve studies of folic acid and protein deficiency anemias, the fluoridation of salt in communities that lack a central water system, and the development of a locally acceptable, inexpensive high protein food. Members of the department have also maintained interest in Africa and this year Dr. Robert B. McGandy spent nearly three months in Nigeria participating in a nutrition survey.

Researches on cardiovascular disease occupy most of our research attention. These include the the Ireland-Boston Heart Study, the National Cooperative Diet and Heart Study, the carefully regulated dietary studies on 20 adult men at the Danvers State Hospital, and the researches of Dr. Bernard Lown and his group on arrythmias, cardioversion, and sudden death. Also, attempts to visualize the interior of blood vessels *in vivo* by means of fiber optics, and varied activities on the experimental production of atherosclerosis in monkeys have been undertaken.

Education remains a key activity of the department at many levels—for students in the School of Public Health, the Medical School, Postdoctorate Fellows, a variety of professional groups, and the lay public through community meetings and articles published in national magazines and newspapers.

Dr. Frederick J. Stare

Dr. Jean Mayer, Dr. Mark Hegsted and Dr. Stare.

Louise Cavallo, Linda Resnick, Kay Kennefick, Hazel Sheppard, Alice Roach, Rita Antonellis, Rita Fitzgerald, Anne Marie Peters, and Marie Zock.

Above—Dr. Stare evaluates the nutritional status of an infant in a West African village.

Dr. Joseph J. Vitale, Dr. Carl C. Seltzer, Dr. Stanley N. Gershoff, Dr. Stephen B. Andrus, and Dr. Robert P. Geyer.

PHYSIOLOGY

The Division of Environmental Health Sciences and Engineering includes the Departments of Industrial Hygiene, Physiology and Sanitary Engineering. In his article below Dr. Whittenberger comments upon the interrelationships among the three departments and describes the problems towards which research is now directed in the Department of Physiology.

DR. JAMES L. WHITTENBERGER, *Head of the Division and Chairman of the Physiology Department.*

The Parent Discipline

THIS department had its origin in the Medical School before the School of Public Health was established; it has continued to be a bridge between the basic medical sciences and the public health engineering activities of the School. The name implies a discipline, but physiology is noted for its breadth and its history of mitoses by which it has been the parent discipline of physiological chemistry, biochemistry, biophysics, and more recently molecular biology. All of these hybrid sciences are relevant to the department's present interests in respiratory physiology, psycho-physiology, toxicology, radiobiology, and the applications of these to current problems of environmental health.

The research activities of the department include a wide range of topics. There are, for example, basic studies on renal and endocrine function, respiratory mechanics, physiology of vision, and mechanisms of action of chemical and drugs. Other projects are problem-oriented, including epidemiologic studies of respiratory disease and accidents, responses to low doses of ionizing radiations, and toxicologic studies of air pollutants and pesticides.

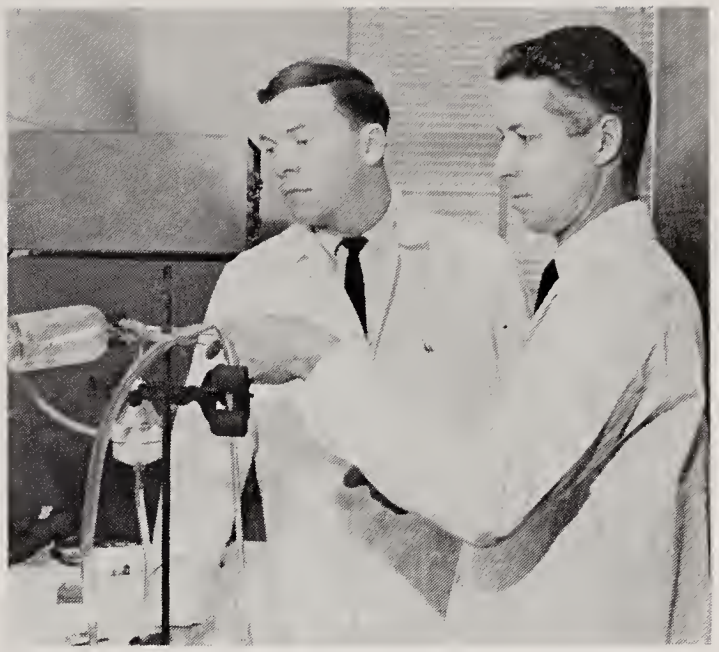
OCCUPATIONAL MEDICINE—Drs. Benjamin G. Ferris and Harry Heimann.

Our Polluted Environment

In teaching as well as in the conduct of research, the department works closely with Industrial Hygiene, and the two departments together are largely responsible for several curricular programs in environmental health, such as occupational medicine, aviation health and safety, industrial hygiene, toxicology, and others as listed in the school catalog.

The difficult problems of assessing health effects of environmental pollution will put increasing demands on the department in the future. Rapid increases of population, urbanization, and chemical technology have combined to produce serious problems of water and air resources and pollution of water, air, soil, and food. These problems are of increasing public concern not only in the United States but in many other countries of the world. The challenge is to develop better quality of information on which to base judgments for control of contamination of the environment by pesticides, lead, carcinogenic chemicals, and others.

DR. JAMES L. WHITTENBERGER



Above—Dr. Edward P. Radford and technician, Clement Nelson, check puffing pattern of cigarette in apparatus designed to draw smoke from cigarette to a filter holder. Dr. Radford holds clamp that alternately closes and releases vacuum line. The research, conducted in the laboratories of the Department of Physiology established that a radio-active element — polonium — may be the long sought link betwen cigarette smoking and lung cancer in man.

Seated—Carol Cronin, Janet Costa, Mary Christopher. *Standing*—Dr. Benjamin Ferris, Mary McKeen, Dr. James L. Whittenberger, Dr. Harry Heimann, Bonnie Page, Dr. William Forbes, Dr. Mary Amdur, Dr. Sheldon Murphy.

Aerospace Medicine Program

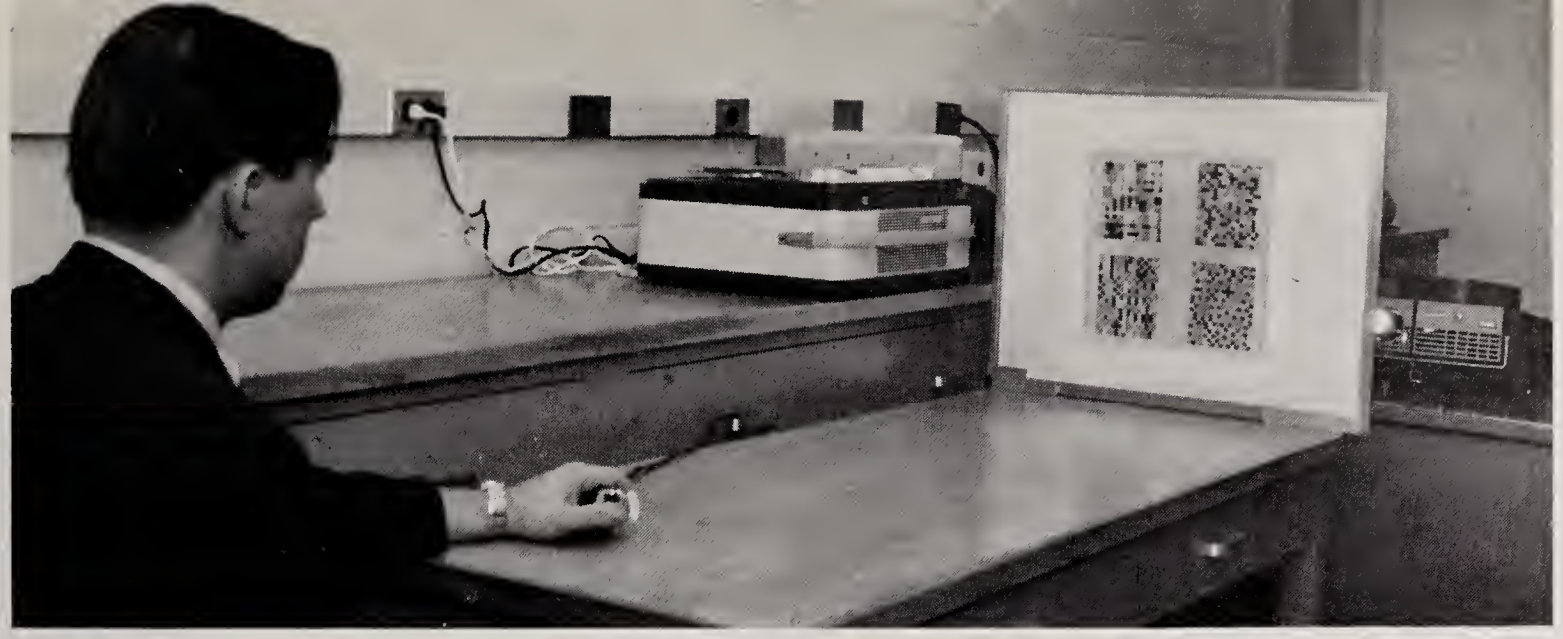
The Guggenheim Center for Aerospace Health and Safety within the School of Public Health works closely with the Department of Physiology and the Department of Industrial Hygiene. In the following statement, Dr. Ross A. McFarland, Daniel and Florence Guggenheim Professor of Aerospace Health and Safety, describes the Center and its research activities.

THE program in aerospace medicine has been developed to provide physicians, biologists and engineers with training in problems encountered in air transportation and in the exploration of space. The training includes (1) physiology, neuro-physiology, psychiatry and psychology; (2) the application of human factors data to space problems for the design and operation of equipment; (3) the techniques of industrial hygiene, sanitation and toxicology; and (4) certain aspects of applied physics, aeronautical engineering, and systems analysis.

The teaching program in aviation medicine began formally in 1954-55 with the organization of a curriculum designed to meet part of the requirements for Board Certification in Aviation Medicine, and in 1957 a grant from the Guggenheim Foundation was obtained to stabilize and expand the program. In the research program, under grants from NASA and the U.S. Air Force, the emphasis is on developing sensitive measures of the impairment of human performance in adverse environments. A number of visual search and recognition tasks have ben developed to measure performance required in space maneuvers and lunar landings. Special projection equipment and eye movement camera devices to record the line of sight are employed to determine the visual parameters, both in relation to normal environmental conditions and unusual conditions. Other research bears upon environmental stresses affecting all aspects of safety in air transportation and space flight.

DR. ROSS A. MCFARLAND

Front row—Dr. Moore, Dr. Mackworth, Dr. McFarland, Dr. Stoudt, Dr. Pickett. *Rear*—Mr. Crowley, Mrs. Tinsley, Mrs. Rubin, Miss Coules, Mrs. Price, Mr. Gruber.



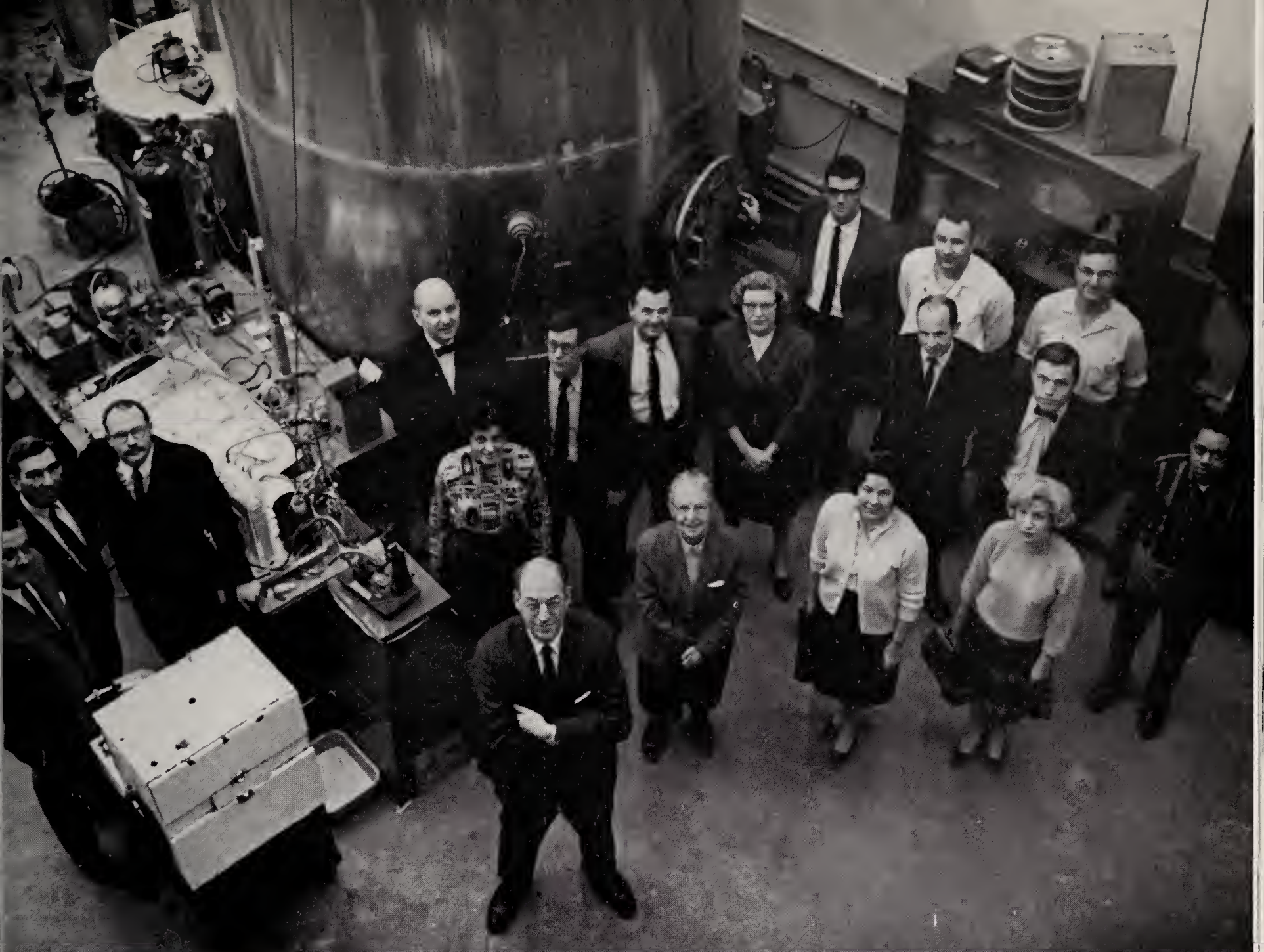
Pattern perception tasks are applied to the study of decision making and rules recognition. Subjects are asked to detect shifts and trends in the pictorial records of random processes.

In the demonstration here, a subject is required to detect a shift in the output of a random process. Due to the shift, a square-shaped pattern emerges from a "noisy" background. The speed and accuracy of detecting such shifts are measured and interpreted in terms of statistical decision models.

A head-mounted form of eye camera is shown. This creates a beam of light which is reflected from the right eye. The resulting highlight is conveyed by a fiber optics cable to a mixing device so that the scene coming from a second fiber optics cable can be combined and shown on a small TV monitor screen. This can be viewed directly as a large viewfinder and motion pictures can be taken at the same time.

Front row—Dr. Kirkland, Dr. Rodgin, Dr. McFarland, Dr. Kay, Dr. Cole. *Rear*—Dr. Davies, Dr. Davis, Dr. Foote, Dr. Dougherty, Dr. Moser, Dr. Miller, Dr. Johnson, Dr. Rand, Dr. Lieberman.

INDUSTRIAL HYGIENE



Far left—Charles Dolloff, Dr. Melvin First, Peter Himot. *Front*—Dr. Leslie Silverman. *Second row*—Mona Little, Delia Croteau, Johanna Rudelt, Jean Cudde. *Next row*—William A. Burgess, William Hinds, Dr. Jacob Shapiro, Janet Walkley, Richard Griffin, Gerald Pacholke, Ernest Mitchell. *Back row*—Daniel Pender, Thomas Baldwin, Fred Wiedeman.

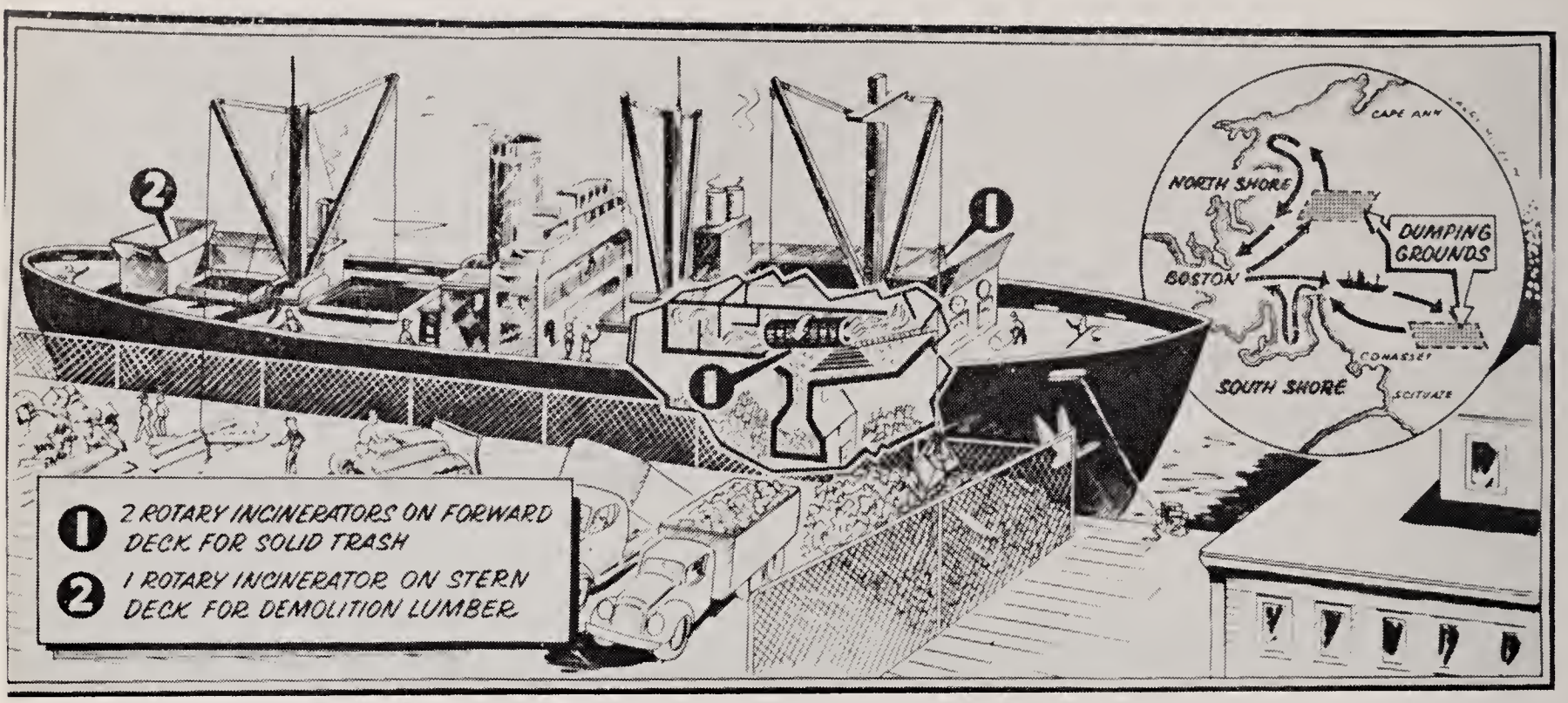
Incineration at Sea

FOR more than 30 years, the Harvard School of Public Health has been concerned with the study and control of air pollution.

Late in 1961, Boston's Mayor Collins and Harvard's President Pusey met, during the laying of the cornerstone for the new 665 Huntington Avenue building, and as an outgrowth of this meeting, our School was asked to help with the city's acute problems of solid waste disposal.

The city's difficulties stemmed from the abrupt closing by the State Legislature of some dump facilities, from extensive urban renewal projects, and from a State Department of Public Health order prohibiting open burning in dumps throughout the Commonwealth.

Because of our research in the control of air pollution from incineration processes (particularly on radio-active wastes for the Atomic Energy Commission), as well as our contacts with the problem of radioactive waste disposal at sea, and because Boston is a coastal city, we gave some thought to sea disposal possibilities. Our idea was to locate reasonably well designed incinerators (of a type used in stationary facilities) on available ship hulls such as World War I or II Liberty or Victory ships of 7,000 to 10,000 tons displacement (see artist's sketch).



From available data, we estimate that the amount of waste generated in Greater Boston and a number of adjacent communities such as Lynn and Beverly to the north and Quincy and Braintree to the south could be handled by a single ship. We believe incinerated ash would settle readily into the sea, and that the designated U.S. Coast Guard dumping grounds (one mile square) 20 miles off shore would handle the waste from 1,000 tons per day of incineration for the next 250 years without creating any problem.

It should be pointed out that a metropolitan commission or municipality can obtain a Liberty ship from the Maritime Commission for $1.00, contingent on a dedication act passed by Congress. A bill filed in the Massachusetts Legislature, by the Metropolitan District Commission in conjunction with the Massachusetts Health Commissioner, Dr. Alfred Frechette, authorizes the MDC to obtain, convert, and operate such a ship incinerator along the lines we have proposed.

This, briefly, is one of the wide range of research projects undertaken by our department, set up over 40 years ago for teaching and research into the problems of occupational disease and, subsequently, air pollution control and radiological hygiene.

Research projects undertaken by students during the past year include the following: design of canopy exhaust hoods, by Michael Varner; disposal of radioactive Krypton in porous media, including underground cavities, by Parker Resit; use of infra-red radiation for particle sizing and identification, by Allen Cudworth; filtration theory, by Stanley Dawson; monitoring environmental neutron doses with nuclear track plates, by Melva Vives; dynamic aerosol agglomeration, by John Yoder; and diffusion of noble gases into solid barriers, by Dwight Underhill.

DR. LESLIE SILVERMAN

SANITARY ENGINEERING

Seated—Prof. W. Stumm, Prof E. W. Moore, Prof. G. M. Fair, Mrs. Hutchinson (Dept. Secretary), Prof. H. A. Thomas, Jr. *Standing*—Mr. John Hernandez, Dr. H. N. Myrick, Dr. R. L. Woodward, Prof. M. B. Fiering, Prof. J. J. Harrington, Dr. R. P. Burden.

Research in Progress

Research projects in progress in the Department of Sanitary Engineering include the following:

Prof. G. M. Fair: Internal hydraulic work in flocculation.

Prof. M. M. Fiering: Testing and developing new techniques of river basin planning; operations research in water quality management; use of forecasts in optimal resource operation.

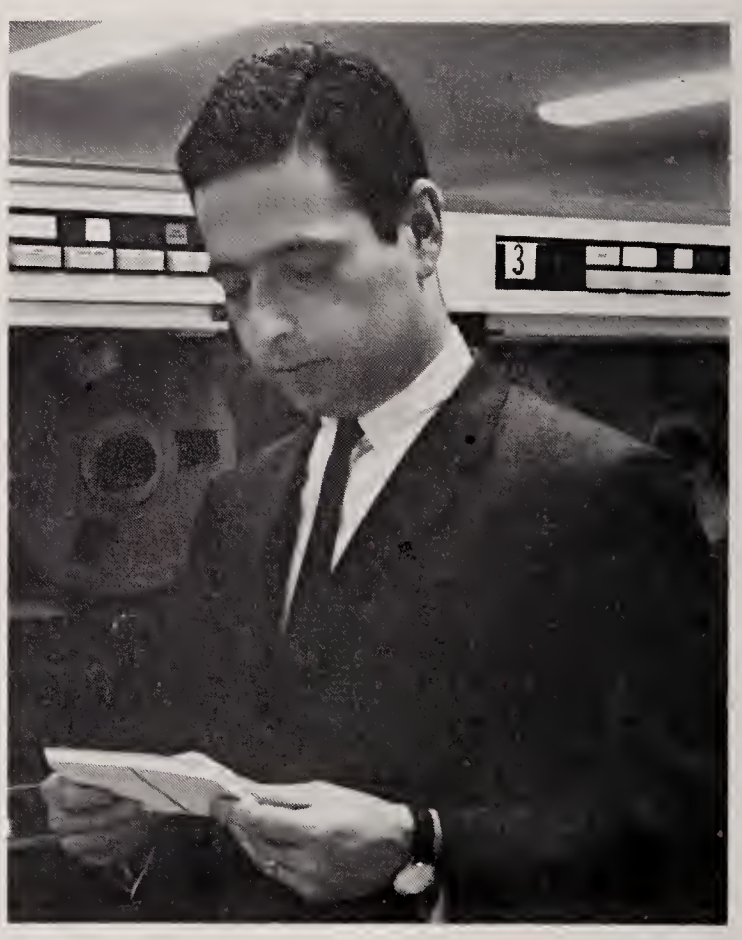
Prof. J. J. Harrington: Mathematical techniques as applied to environmental enginering.

Prof. Werner Stumm: Modes of corosion inhibition in natural waters; chemistry of aqueous iron and manganese; chemical aspects of coagulation and flocculation.

Prof. H. A. Thomas, Jr.: Operation research in water quality management: Investigation of the validity and utility of new methods of design and arrangement of water resource systems; application of techniques of operations research combining engineeering design, economic analysis, and governmental planning.

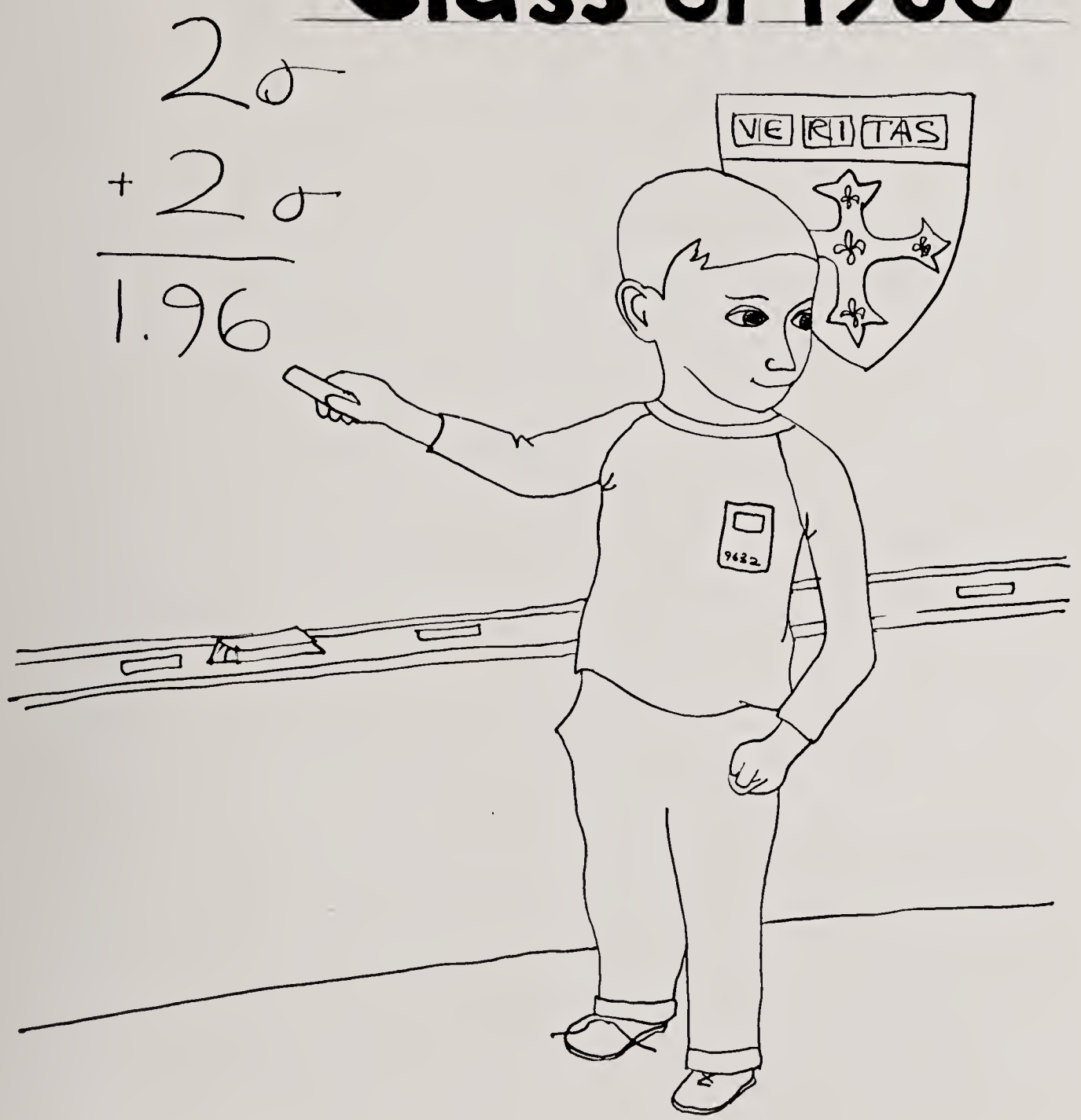
Prof. Charles Walcott: Vibration receptors of the spider *Achaeatanea:* light sensitivity in the pupa of the moth *Antherea:* (Biology Department: The sensory basis of navigation in homing pigeons.)

Dr. R. L. Woodward: Transport and fate of pollutants in soil.



Dr. Myron B. Fiering, Assistant Professor of Engineering and Applied Mathematics, has recently completed the construction of a large comprehensive model for simulation studies of the Delaware River System. Results of his research will be published in a forthcoming book.

Class of 1965



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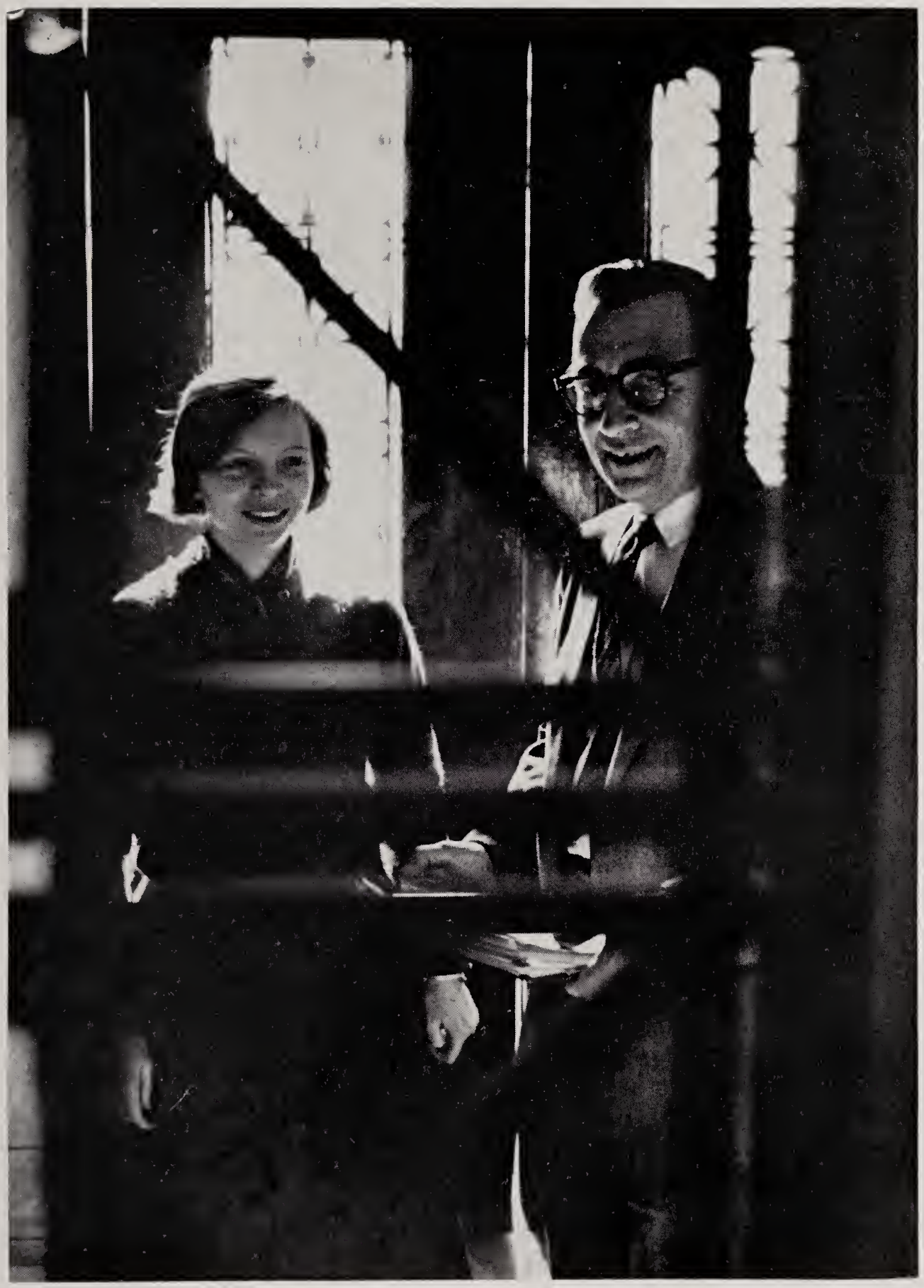

Constance Conrad, Charles Rand

CONSTANCE CAMPBELL CONRAD—401 6th Avenue N.E., Jamestown, N.D.; A.A., 1956; B.A., 1958; M.D., 1961; George Washington University; medical officer, Child Welfare Clinics, Lagos City Public Health Dept., Nigeria; full time student—General Program. Husband: J. Eyle; child: Kathryn Awara, 1½.

CHARLES GORDON RAND—2376 Orlando Avenue, Ottawa, Ontario; B.A., Mt. Allison University, 1938; M.D.C.M., McGill University, 1942; Eastern Arctic Zone, Superintendent, Dept. National Health and Welfare, Ottawa, Ontario; full time student—General Program. Wife: Margaret H.; child: Stephen C., 15; Susan B., 23; Charles G., Jr., 25.

THOMAS RAYMOND BYRD—Route 4, Kershaw, S.C.; B.S., Clemson College, 1957; M.D., Medical College of South Carolina, 1961; M.P.H., Harvard University, 1964; head, Health Practices Branch, Prev. Med. Div., Bureau of Med. and Surg., U.S. Navy; full time special student—Epidemiology and Microbiology; future plans: preventive medicine, U.S. Navy.

APARNA CHATTORAJ—378 Marlboro St., Boston, Mass.; I.Sc., Univ. of Calcutta, 1952; M.B.-B.S., 1958; D.G.O., 1959; Boston Univ. Graduate School 1962-present; part time student—Microbiology. Married. Previous position: House Surgeon, Chittaranjan Seva Sadan, Calcutta, 1958-60.

FRITZ DAGUILLARD—Cayes, Haiti; M.D., University of Haiti, 1961; intern, Einstein Medical Center, Philadelphia, Pa.; full time student—Microbiology; career plans: D.P.H., Harvard School of Public Health and teaching.

JUSTIN LYLE CONRAD—401 6th Avenue N.E., Jamestown, N.D.; B.A., Northwestern University, 1957; M.D., George Washington University, 1961; Peace Corps physician, Nigeria; full time student—Micro-Tropical P. H. Wife: Constance Joan; child: Kathryn Awara, 1½.

MARY ANN McNICHOL—38 North Shore Avenue, Danvers, Mass.; A.B., Boston University, 1957; A.M., Boston University, 1959; Microbiologist — Peace Corps, El Salvador; full time student—Microbiology.

Thomas Byrd, Aparna Chattoraj, Fritz Daguillard

Lyle Conrad, Mary Ann McNichol, with Dr. Ley

John Chappel, James Walker, Ann Pettigrew, Richard Morrow

Delfin DeLeon, Catherine Coolidge, Charles Azu

Warren Berggren, William Foege, Debhanom Muangman

JOHN NELSON CHAPPEL—Coleman, Alberta, Canada; B.A., University of Alberta, 1955; M.D., University of Alberta, 1960; Physician, CARE—MEDICO—Jerantut, Malaysia; full time student—Tropical Public Health; future career plans: resident in psychiatry, Univ. of Chicago, teaching and practicing community psychiatry and preventive medicine in the developing countries and N. America. Wife: Valerie; child: Margot, 2.

JAMES ELLIOT CABOT WALKER—30 Gloucester Street, Boston, Mass.; B.A., Williams College, 1949; M.D., University of Pennsylvania, 1953; Assoc. Director and Senior Associate in Medicine, Peter Bent Brigham Hospital; part-time student—Medical Care (PHP); next position: Professor and Clinical Planner, University of Connecticut School of Medicine.

ANN HALLMAN PETTIGREW—17 Ware Stret, Cambridge, Mass.; B.A. Radcliffe College, 1956; M.D., Boston University, 1960; first year resident in Pathology, New England Center Hosp., Boston, Mass.; part time student—Epidemiology. Husband: Thomas F.

RICHARD HAROLD MORROW, JR.—Waukegan, Ill.; B.A., Swarthmore College, 1954; M.D., Washington University, St. Louis, 1958; medical officer, U.S.P.H.S. (CO), Accra, Ghana; full time student—Epidemiology and Tropical Public Health. Wife: Helga; children: Dwight, 4; Densua, 2; Odaybea, 1.

DELFIN DANCEL DE LEON—1079 P. Salita, Bo, Obrevo, Tondo, Manila, Philippines; D.V.M., University of Philippines, 1957; M.S., Texas A & M University, 1960; post-doctoral fellow, University of Puerto Rico, San Juan; full time special student—Tropical Public Health. Wife: Aida; child: Aidelle, 1 mo.

CATHERINE COOLIDGE—Manchester, Mass.; A.B., Radcliffe College, 1953; M.D., Johns Hopkins, 1958; Assistant in Medicine, Peter Bent Brigham Hospital; part time student—Tropical Public Health.

CHARLES CHUKWUEMEKA AZU—Pilgrim Baptist Hospital, Issele—Uku, Nigeria; B.S., Washburn University, 1955; M.D., St. Louis University, 1959; chief resident, surgery, Homer G. Phillips Hospital, St. Louis; full time student—Tropical Public Health; next position: medical director, Pilgrim Baptist Hospital, Nigeria.

WARREN LEE BERGGREN—Aurora, Nebr.; M.D., Nebraska University, 1955; M.P.H., Harvard University, 1963; medical missionary, Foreign Mission Dept. of the Evangelical Free Church of America, Minneapolis, Minn. (last in Ubangi Province, Congo); full time student—Tropical Public Health; Wife: Gretchen; Child: Ruth Elizabeth, 2.

WILLIAM HERBERT FOEGE — Washington; B.A., Pacific Lutheran University, 1957; M.D., University of Washington, 1961; epidemiologist, U.S.P.H.S., Denver, Colo.; full time student—Tropical Public Health; future plans; preventive medicine, Eastern Nigeria. Wife: Paula; children: David, 2.

DEBHANOM MUANGMAN — 489 Rajvithi Road, Payathai, Bangkok, Thailand; B.A., Grinnell College, 1958; M.D., Jefferson Medical School, 1962; intern and medical resident, New Britain General Hospital, Conn.; full time student—Tropical Public Health; future plans: to work toward D.P.H. then return to the Ministry of Health of Thailand. Wife: Chayaporn.

John Speidel and James Stere, with Drs. Heer, Wyon and Plank.

JOHN JOSEPH SPEIDEL — 5062 Garfield Avenue, S. Minneapolis, Minn.; A.B., Harvard University, 1959; M.D., Harvard University, 1963; Intern in medicine, St. Luke's Hosp., New York City; full time student—Demography; next posiiton: Residency in Public Health, City of New York Health Dept.

JAMES H. STEERE—1783 Las Canoas Road, Santa Barbara, Calif.; B.A., Pomona College, 1949; B.S., University of Calif., 1951; D.V.M., University of Calif., 1953; Veterinary practitioner; full time student—Ecology. Wife: Ardeth; children: Robin, 14; Leslie, 12; Carrie, 10; Melinda, 8; Thomas, 5; Robert, 2.

Judith Mabel, Michael Latham

Lorraine Jaffe, Leslie Klevay, Johanna Dwyer, Thora Runyan

Elizabeth Watkins, Dorothy Worth, Alice Hosack

John Miller, Gro Brundtland, Stefania Vago, Christian Hansen

JUDITH ANN MABEL—96 Sycamore Street, Albany, New York; B.S., Cornell University, 1964; full time student—Nutrition.

MICHAEL CHARLES LATHAM—Brooklands, Hooe, Near Battle, Sussex, England; B.A., University of Dublin, Ireland, 1949; M.B., B.Ch., B.A.O., University of Dublin, 1952; D.T.M.&H. University of London, 1958; Medical Officer, Ministry of Health, Dar—es—salaam, Tanganyika; full time student—Nutrition; future plans—Research Fellow, Dept. of Nutrition, Harvard S.P.H. Wife: Patricia Anne; Children: Miles Donald, 9; Mark Edgar, 7.

LORRAINE KUGELL JAFFE — Hartford, Conn.; A.B., University of Vermont, 1963; full time student—Nutrition.

LESLIE MICHAEL KLEVAY—8109 Saramie Avenue, Skokie, Ill.; B.S., University of Wisconsin, 1956; M.D., University of Wisconsin, 1960; S.M.Hyg., Harvard University, 1962; Medical Intern—Washington University. Service, St. Louis City Hospital, St. Louis, Mo.; full time student—Nutrition; future plans: Research in Nutrition.

JOHANNA TODD DWYER — 241 Maplewood Avenue, Syracuse, N.Y.; B.S., Cornell University, 1960; M.S., University of Wisconsin, 1962; Instructor, Cornell University, Ithaca, N.Y.; full time student—Nutrition.

THORA C. RUNYAN—199 Park Drive, Boston, Mass.; B.S., University of Idaho, 1961; Research Assistant, Harvard School of Public Health; full time student—Nutrition. Husband: William Scottie; child: Laura, 3.

ELIZABETH LAW WATKINS — 5 Cutler Avenue, Cambridge, Mass.; A.B., Bryn Mawr College, 1944; M.S.S.A., Western Reserve University, 1950; S.M. in Hyg., Harvard University, 1958; Asst. Professor of Social Work in Public Health, University of Michigan; full time student — Maternal and Child Health; future career plans: continued study.

DOROTHY JANE WORTH—33 Washington Street, Newton, Mass.; M.D., St. Louis University, 1956; coordinator of Maternal and Child Health Care, Newton Health Dept.; part-time student—Maternal and Child Health. Husband: Robert Berg, M.D. Children: Benjamin, 7; Joshua, 5; Rachel, 3, Isaac, 1.

ALICE MARIE HOSACK — 22 Evans Way, Boston, Mass.; B.S., University of Buffalo, 1945; M.A., University of Chicago, 1951; M.S.Hyg., Harvard University, 1959; Ass't Professor, Boston University, School of Nursing, Boston, Mass.; part time student—Maternal and Child Health.

JOHN KNOX MILLER—Luluabourg, Republic of Congo, (U.S. address: Box 330, Nashville, Tenn.); B.S., Davidson College, 1943; M.D., Tulane University, 1946; M.P.H., Tulane University, 1948; Missionary Physician with American Presbyterian Congo Mission; full time student—Material & Child Health; next position: Director of Institut Medical Chretien du Kasai, at Luluabourg, Rep. of Congo. Wife: Aurie; children: Holly, 16; Jim, 14; John Neal, 7; Merle, 5.

GRO HARLEM BRUNDTLAND — C. C. 2a, Oslo, Norway; M.D., University of Oslo, 1963; internship, Barum Hospital, Sandvika, Norway; full time student—Maternal and Child Health; future plans: work in Mat. and Child Health Div. of Norwegian Ministry of Health. Husband: Arne Olav; children: Knut, 3½; Kaja, 1½.

STEFANIA VAGO — 13 Drom Africa Blv., Ashkalon, Israel; M.D., Charles University, Prague, Czechoslovakia, 1949; Pediatrician, Maternal and Child Dept., Ministry of Health, Jerusalem, Israel; full time student—Maternal and Child Health; next position: return to same job. Husband: Tibor.

CHRISTIAN MAX HANSEN — North River Road, New Hope, Penna.; B.A., Haverford College, 1954; M.D., University of Pennsylvania, 1958; Pediatrician with Indian Health Service, 1961. Peace Corps physician, Ankara, Turkey; full time student — Maternal and Child Health; career plans: M.C.H. Div. of Indian Health, U.S,P.H.S., Wife: Alexandra; children: Marc, 5; Amy, 3; Jonathan, 2.

Patricia Scola, Max Bulian, Gretchen Berggren, Heather Day

PATRICIA SEXTON SCOLA—23 Regent Circle, Brookline, Mass.; A.B., Goucher College, 1957; M.D., Boston University, 1961; Resident in Pediatrics, Boston City Hospital; full time student—Maternal and Child Health; future career plans: indefinite. Husband: Francis; child: Francis H. III, 1.

MAX JOSEPH BULIAN — 44 Valley Road, Chestnut Hill, Mass.; B.S., Tufts University, 1943; M.D., Tufts University, 1946; private practice—Obs. Gyn., Boston and Belmont, Mass.; part time student—Maternal and Child Health. Wife: Adele; children: John, 12; Joseph, 9; Emily, 8.

GRETCHEN GLODE BERGGREN—203 Park Drive, Boston, Mass.; B.A., Nebraska State, 1954; M.D., University of Nebraska, 1958; certificate in Trop. Med., Prince Leopold Institute, of Trop. Med., 1959; medical missionary, Ubangi Province, Republic of Congo (Leopoldville); part time student—Maternal and Child Health; future career plans: teaching overseas. Husband. Warren L.; child: Ruth Elizabeth, 2.

HEATHER MURISON DAY—24 South Gate Park, West Newton, Mass.; M.B., Ch.B., Edinburgh University, 1957; Assistant Toxicologist, Arthur D. Little, Inc., Cambridge, Mass.; full time student—Maternal and Child Health; career plans: two year residency in Public Health with the Mass. State Health Dept. Husband: Christopher.

Adeyemi Ademola
Donald Frederickson
Abdul Al-Awadi
Harvey Remmer

Kay Keiser
Marion Highriter
Jeannette Simmons

Alan Levenson
David Danielson
Joan Altekruse
Gerald Renthal

GEORGE ADEYEMI ADEMOLA — Federal Ministry of Health, Broad Street, Lagos, Nigeria; M.B.B.S., Durham; D.P.H., London; Senior Health Officer, Lagos (Federal Ministry of Health); future career plans: return to Ministry of Health. Wife: Rosa.

DONALD TELL FREDRICKSON — Syracuse, N.Y.; B.A., Syracuse University, 1956; M.D., Cornell University, 1961; Chief Field Staff Coordination and Development Section—Heart Disease Control Program, U.S.P.H.S., Washington, D.C.; full time student—Public Health Practice.

ABDUL RAHMAN ABDULLA AL-AWADI —Ministry of Public Health, P.O.B. 5, Kuwait; B.S., American University, Beirut, 1958; M.B.-Ch.B., Aberdeen Univrsity, Scotland; resident physician, Al-Sabah Hospital, Kuwait; full time student — Public Health Administration; future position: administration post at the Ministry of Health, Kuwait.

HARVEY IRA REMMER—78 Upsala Street, Worcster, Mass.; B.A., Clark University, 1958; M.D., Tufts University, 1962; resident, Mass. Dept. Public Health, Boston; full time student —Public Health Practice.

A. KAY KEISER — Boston, B.S., Seton Hall University; M.P.H., Yale University, 1962; Medical Care Res. Ass't, Yale Univ.; full time student—Public Health Practice.

MARION ELIZABETH HIGHRITER — 409 W. Academy Street, Wilkes-Barre, Penna.; B.A., Mt. Holyoke College, 1950; M.N., Yale University, School of Nursing, 1953; M.P.H., Harvard University, 1958; Public Health Nursing Supervisor, San Juan Basin Health Unit, Durango, Colo.; full time student — Public Health Practice.

JEANNETTE J. SIMMONS—4351 Beck Avenue, Studio City, Calif.; B.S., Iowa State University, 1943; M.P.H., University of Michigan, 1945; Lecturer in Public Health, University of Calif. at Berkeley; full time student—Health Education; future career plans: teaching.

ALAN IRA LEVENSON — 15 Fernald Drive, Cambridge, Mass.; A.B., Harvard University, 1957; M.D., Harvard University, 1961; Resident in Psychiatry, Mass. Mental Health Center, Boston; full time student—Public Health Practice; future plans: Public Health Psychiatry and Community Mental Health. Wife: Myra.

DAVID ARTHUR DANIELSON — Vineyard Haven, Martha's Vineyard, Mass.; A.B., Bates College, and Boston University, 1960; teaching assistant, Peace Corps volunteer leader, Nigeria; full time student—Public Health Practice; future career plans: possible doctorate. Wife: Judith; children: Robin Adesode, 2½; Benjamin Darius, 7 mo.

JOAN MORRISSEY ALTEKRUSE—79 Amity Street, Cohoes, N.Y.; A.B., Vassar College, 1949; M.D., Stanford University, 1960; Chief OPD, U.S.P.H.S. Hospital, San Francisco, Calif.; full time student—Public Health Practice. Husband: Ernest; children: Clifford, 10; Lisa, 9; Janice, 8; Ernest Jr., 6; Sean, 3; Lowell, 2; Philip, 11.

A. GERALD RENTHAL—27 N. Wood Lane, Woodmere, N.Y.; A.B., Yale College, 1951; M.D., Columbia University College of Physicians and Surgeons, 1955; fellow in Neuroradiology, Neurological Institute of N.Y.; full time student —Public Health Practice.

ARTHUR RAY JACOBS—14 Mountain Terrace, Upper Montclair, N.J.; B.A., Wesleyan University, 1957; M.D., University of Rochester, 1961; full time student—Public Health Practice; district health officer, U.S.P.H.S., Chronic Illness and Aging, Seattle, Wash.; career plans: public health administration. Wife: Marilyn; child: Catherine E., 1½.

Arthur Jacobs
Joseph Yacavone
Robert Moroney

Leonard Sagan
Paul Chen
Robert Morgan
Donald Watkin

JOSEPH ANTHONY YACOVONE—39 Sylvan Road, Rumford, R.I.; A.B., Brown University, 1936; D.M.D., Tufts Dental School, 1942; Visiting Lecturer, Oral Pathology and Preventive Dentistry, University of Rhode Is.; full time student—Public Health Practice; next position: Director of Dental Public Health, State of R.I. Wife: Margaret; children: Carolyn Ann, 13; Brian, 12.

ROBERT MICHAEL MORONEY—250 Spring Street, West Roxbury, Mass.; A.B., Boston College, 1960; M.S.W., Boston College, School of Social Work, 1962; medical social consultant, Heart Disease Control Program, Penna. Dept. of Health, U.S.P.H.S. (CO); full time student—Public Health Practice; career plans: rturn to U.S.P.H.S. — Heart Disease Control Program, D.C.D.; B.S.S. in general area of medical care. Wife: Margaret Mary; child: Monica, 9 mo.

LEONARD ARTHUR SAGAN—126 Marion Avenue, Mill Valley, Calif.; A.B., Stanford University, 1950; M.D., University of Chicago, 1955; Atomic Bomb Casualty Commission, Nagasaki, Japan; full time student—general program. Wife: Ginetta; children: Loring, 11; Duncan, 9; Pico, 8.

PAUL C. Y. CHEN—c/o University of Malaya, Kuala Lumpur, Malaysia; M.B., B.S., University of Malaya, Singapore, 1960; Medical Officer, Malaysia; Lecturer, University of Malaya; full time student—Public Health Practice; next position—lecturer, Univ. of Malaya. Wife: Siew Tin; child: Catherine J. A., 2.

ROBERT WOODWARD MORGAN, JR. — 5 Valley Road, Concord, Mass.; A.B., Harvard University, 1946; M.A., Boston University, 1960; research associate, Nigerian Inst. of Soc. and Econ. Res., University of Ibadan, Nigeria; full time student—Public Health Practice. Wife: Dorothea; children: Georgia, 13; Chip, 12; Matthew, 10.

DONALD MORGAN WATKIN — 17 Croton Street, Wellesley Hills, Mass.; A.B., Hamilton College, 1943; M.D., Harvard University, 1946; Special Consultant, ICNND, Washington, D.C.; full time student—General Program; next position: Director ICNND Survey of Paraguay. Wife: Virginia; children: Henry, 13; Mary Ellen, 10; Edward, 8; Ann, 6.

DARRELL EUGENE ANDERSON — Minneapolis, Minn.; B.Ch.E., University of Minnesota, 1958; Assoc. Public Health Eng., Minn. Health Dept., Minneapolis; full time student—Industrial Hygiene. Wife: Karen.

MICHAEL OLIVER VARNER—1760 San Luis Drive, San Luis Obispo, Calif.; B.S. Eng., Calif. State Polytechnic College, 1963; Student HSPH; full time student—Industrial Hygiene; future career plans: Industrial Hygine Engineer. Wife: Sharon.

MALCOM STRONG FITZPATRICK — 164 Main Street, Montpelier, Vt.; B.S., Yale University, 1959; B.E., Yale University, 1960; M.S., Stanford University, 1961; Sanitary Engineer, U.S.P.H.S., Charlottsville, Va.; full time student —Industrial Hygiene. Wife: Elizabeth Ruth.

DWIGHT WINGATE UNDERHILL — 24 Fenwood Road, Boston, Mass.; B.E., Yale University, 1958; M.S. in Hyg., Harvard University, 1963; Chemist, U.S. Army; full time student—Industrial Hygiene.

JOHN DANIEL YODER — 199 Park Drive, Boston, Mass.; B.S., Penna. State University, 1952; S.M.Hyg., Harvard University, 1954; Industrial Hygiene Engineer, Humble Oil Co. and Esso Research and Engineering Co.; full time student—Industrial Hygiene. Wife: Nancy Ann; children: Karen, 12; Kathleen, 10; James, 7.

STANLEY VERNE DAWSON — Cambridge, Mass.; B.S., Stanford University, 1953; M.S., California Tech., 1956; research engineer, Harvard School of Public Health; full time student —Industrial Hygiene. Wife:

Darrell Anderson
Michael Varner
Malcolm FitzPatrick

Dwight Underhill
John Yoder
Stanley Dawson

Parker Reist
Melva Vives

Joseph Cimino, Norman Hasler, Lionel Lieberman, Raymond Murphy, John Peters

Michael Davis, Anne Schaefer, Larry Samuels

Joseph Brain
Anton Vierling
Gerald Parker
with Dr. Little
and Bonnie Page

PARKER CRAMER REIST — State College, Penna.; B.S., Pennsylvania State University, 1955; S.M., M.I.T., 1957; S.M.Hyg., Harvard University, 1963; engineer, Atomic Energy Commission, Pittsburgh, Penna.; full time student—Radiological Health. Wife: Janet.

JOHN MILTON PETERS—199 Park Drive, Boston, Mass.; B.S., University of Utah, 1957; M.D., University of Utah, 1960; M.P.H., Harvard University, 1964; Nuclear Med. Officer, U.S. Army Engineer Ractors Group, Washington, D.C.; full time student—Occupational Medicine. Wife: Carolyn; children: John, 6; Philip, 5; Susa, 3; Charles, 1.

RAYMOND L. H. MURPHY, JR.—11 Conry Cresc., Jamaica Plain, Mass.; B.S. College of the Holy Cross, 1954; M.D., N.Y. University, 1961; medical resident, St. Vincent's Hospital, N.Y.; full time student—Occupational Medicine. Wife: Margaret; children: Raymond, 6; Michael, 4; Ann, 4; Maureen, 1; Alice, 6 mo.

LIONEL MELVIN LIEBERMAN — 483 Boylston Street, Brookline, Mass.; B.A., University of Virginia, 1948; M.D., University of Virginia, 1952; Private Practice, Hampton, Va.; full time student — Environmental Health — Occupational Health. Wife: Mara; children: David, 10; Ruth, 7; Nina, 5; Gay, 5.

NORMAN B. HASLER—114 Eastern Avenue, Arlington, Mass.; A.B., Indiana University, 1942; M.D., Indiana University, 1944; Div. Med. Director, Liberty Mutual Ins. Co., Boston, Mass.; part time student—Occupational Medicine. Wife: Catherine; children: Elizabeth, 14; Kathleen, 12; John, 11.

JOSEPH ANTHONY CIMINO—2 Burnsdale Avenue, Valhalla, N.Y.; B.A., Harvard University, 1956; M.S., Fordham University, 1958; M.D., University of Buffalo, 1962; M.I.H., Harvard University, 1964; fellow, Atomic Energy Comm., Boston, Mass.; full time student—Occupational and Environmental Medicine; career plans: practice and teach occupational and environmental medicine: Wife: Margaret; children: Andrea, 6; Laura, 5; Lisa, 3½, Joseph, 2½, Linda, 1½.

MELVA V. VIVES—50 Harvard Street, Cubao, Quezon City, Philippines; B.S. Chem. Eng., University of St. Tomas, 1961; Scientist I, Phil. Atomic Research Center, Phil. Atomic Energy Commission; full time student—Radiation Dosimetry; future career plans: continue working with Phil. Atomic Research Center.

MICHAEL ALLAN DAVIS — 91 Wheatland Avenue, Dorchester, Mass.; B.S., Worcester Polytechnic Institute, 1962; M.S., Worcester Polytechnic Institute, 1964; teaching assistant, Worcester Polytechnic Inst.; full time student—Radiological Health; future plans: doctoral candidate at HSPH in Radiation Biology. Wife: Rona.

ANNE WARD SCHAEFER — 11 Elmwood Road, Westport, Conn.; B.A., Trinity College, 1963; full time student—Radiation Biology.

LARRY DAVID SAMUELS — New Windsor, Ill.; B.A., Blackburn College, 1955, B.S., University of Illinois, 1957; M.D., University of Illinois, 1959; S.M.Hyg., Harvard University, 1961; project officer, Midwest Env. Hlth. Study, U.S.P.H.S., Iowa City, Iowa; full time student—Radiological Hygiene. Wife: Margaret; children: Shirley, 7; Larry Keith, 6; Nils, 3; Rolf, 3; Lisa, 1½.

JOSEPH DAVID BRAIN—Cambridge, Mass.; B.A., Taylor University, 1961; S.M., Harvard University, 1962; S.M.Hyg., Harvard University, 1963; full time student—Physiology. Wife: Judith.

ANTON FERDINAND VIERLING — Boston, Mass.; B.S., University of Notre Dame, 1961; M.S., University of Connecticut, 1963; S.M.Hyg., Harvard University, 1964; teaching assistant, University of Conn.; full time student—Radiological Hygiene. Wife: Jacqueline.

GERALD S. PARKER — 12 Lowell Road, Brookline, Mass.; B.S., Northeastern University, 1953; M.S., Harvard University, 1955; Senior Sanitary Engineer, Mass. Dept. of Public Health, Boston, Mass.; full time student—Radiological Health. Wife: Sandra M.; children: Jonathan A., 9; Ruan N., 5.

Wayne Johnson, Royce Moser, Charles Kirkland, David Rodgin, Chesley Davies

Richard Easton, John Dougherty

WAYNE A. JOHNSON — 14 Summit Road, Wellesley, Mass.; B.S., Wake Forest College, 1960; M.D., Bowman Gray, 1963; Physician, Wilford Hall USAF Hospital, San Antonio, Texas; full time student—Aviation Medicine; next position: Resident, Aviation Medicine, USAF, Brooks AFB, Tex. Wife: Camilla D.; child: Wayne, Jr., 7.

ROYCE MOSER, JR.—104 South Oak, Versailles, Mo.; A.B., Harvard College, 1957; M.D., Harvard Medical School, 1961; full time student —Aviation Medicine; Director, Aerospace Med., Schilling A.F.B., Kans.; future plans: continue aviation medicine residency at School of Aerospace Med., Brooks A.F.B., Tex. Wife: Lois; children: Donald, 6 mo.; Beth Anne, 2.

CHARLES PATRICK KIRKLAND—1717 So. Rankin Street, Edmond, Okla.; B.S. Pharmacy, University of Oklahoma, 1959; M.D., University of Oklahoma, 1963; Physician, U.S.A.F., Lackland A.F.B., Tex.; full time student—Aviation Medicine; future plans: U.S.A.F. Aerospace Medicine residency. Wife: Patricia.

DAVID WILLARD RODGIN—551 Brookline Avenue, Brookline, Mass.; A.B., Yale University, 1949; M.A., George Washington University, 1952; Ph.D., Purdue University, 1955; M.D., University of Cincinnati, 1961; Flight Surgeon, U.S. Air Force; full time student — Aviation Medicine; next position: continuation of Residency in Aviation Medicine, School of Aerospace Medicine, Brooks AFB, Tex. Wife: Trudi; child: Lisa, 1½.

CHESLEY REUBEN DAVIES—Fillmore, Utah; B.S., University of Utah, 1960; M.D., University of Utah, 1963; physician, U.S.A.F., San Antonio, Tex.; full time student — Aviation Medicine. Wife: Mary Elizabeth; children: Laurie, 9; Brady R., 7.

RALPH ENGLISH MILLER — 14 Hereford Street, Boston, Mass.; A.B., Dartmouth, 1958; M.D., Harvard University, 1961; Chief, Physiology Section, Dept. Neuroendo., Walter Reed Army Inst. of Research, Washington, D.C.; full time student—Environmental Physiology; future plans: space physiology and medicine. Wife: Pamela.

EDWARD JAMES BURGER, JR. — Dover, Mass.; B.Sc., McGill University, 1954; M.D.C.M., McGill University, 1958; M.I.H., Harvard University, 1960; flight surgeon, group medical officer, U.S. Navy, Beaufort, S.C.; full time student —Physiology Department; future plans: D.Sc., HSPH. Wife: Sarah Greene; children: Heidi, 3; Hilary, 1.

EDWIN LINCOLN WILDNER, JR.—4 Merry Point Terrace, Newport News, Va.; B.A., Yale University, 1952; M.D., University of Virginia, 1956; Physician, University of Florida; full time student—Aviation Medicine; next position: Resident in Psychiatry, Bowman Gray School of Medicine, Winston-Salem, N.C.

WON CHUEL KAY — Seoul, Korea; M.D. Yunsei University, 1945; Dr. Med. Sc., Yunsei University (Korea), 1964; Surgeon General, Rep. of Korea Air Force, Seoul, Korea; full time student—Aviation Health. Wife: Suk in Choi.

RICHARD EDWIN EASTON—900 Memorial Drive, Cambridge, Mass.; B.A., Kansas University, 1958; M.D., Kansas Medical School, 1962; M.P.H., Harvard University, 1964; Flight Surgeon, North American Aviation, Inc., L.A., Cal.; full time student—Aviation Medicine; future position — University of Kansas Medical School, faculty, Dept. of Preventive Med. and Community Health. Wife: Mary; child: Leslie, 3.

JOHN DENNIS DOUGHERTY — 191 Commonwealth Avenue, Boston, Mass.; A.B., Kansas University, 1955; M.D., Kansas University, 1958; Regional Flight Surgeon, Federal Aviation Agency, Ft. Worth, Tex.; full time student—Aviation Medicine; future plans: continue in aerospace medicine at the Guggenheim Center for Aerospace Health and Safety. Wife: Margery; children: John, 6; Andrew, 2.

Ralph Miller, Edward Burger, Edwin Wildner, Won Chuel Kay

Paul Foote, Audie Davis, Edward Cole, James Drolte

Gary Friedman, Stephen Wittenberg, John Davy

PAUL RICHARD FOOTE—40 Cayuga Street, Seneca Falls, N.Y.; A.B., Cornell University, 1943; M.D., Cornell University, 1945; private physician, Seneca Falls; full time student—Aviation Medicine; future plans: continue residency in aerospace medicine. Wife: Lois; children: Sarah, 16; Ellen, 14; Paul, 10; Caroline, 5; Martha, 2.

AUDIE WHITE DAVIS, JR.—2107 E. Robinson, Norman, Okla.; B.S., University of Alabama, 1953; M.D., Medical College of Alabama, 1957; Chief Review and Records Control Federal Aviation Agency, Oklahoma City, Okla.; full time student — Aviation Medicine. Wife: Bernice; child: Cheri, 15.

EDWARD FOWLER COLE—853 Park Lake Court, Orlando, Fla.; B.S., University of Florida, 1953; M.D., Vanderbilt University, 1960; physician, U.S. Army; full time student—Aviation Medicine; next position: resident in Aviation Med. at the Sch. of Aviation Med., Brooks Air Force Base, San Antonio, Tex. Wife: Jane; children: Deborah, 10; Katherine, 9; Edward, Jr., 1½.

JAMES ELMER DROLTE—Pretty Prairie, Kan.; B.S., Agric., Kansas State College, 1955; B.S., Kansas State University, 1959; D.V.M., Kansas State University, 1961; Captain, U.S. Army Veterinary Corps., San Diego, Cal.; full time student —General Program; next position: U.S. Army, Korea. Wife: Mary; children: De Anna, 8; David, 6; Denise, 3; Angela, 3 mo.

Richard Tjalma, Maureen Molloy, Manning Feinleib, Joseph Fraumeni, Lowell Smith,
Charles Neave, Tomio Hirohata

GARY DAVID FRIEDMAN — 35 Alpine Street, Cambridge, Mass.; B.S., University of Chicago, 1956; M.D., University of Chicago, 1959; medical officer, Heart Disease Epid. Study, Framingham, Mass.; part time student—Biostatistics. Wife: Ruth; children: Emily, 4; Justin, 1½.

STEPHEN MARTIN WITTENBERG—10 Dana Street, Cambridg, Mass.; A.B., Yale University, 1957; M.D., N.Y.U., School of Medicine, 1961; Heart Disease Control Officer, Mass. Dept. of Public Health; part time special student—Epidemiology and Biostatistics.

JOHN ROBERT DAVY—253 Crafts Street, Newtonville, Mass.; A.B., Yale University, 1954; M.D., Temple University, 1958; physician, U.S.-P.H.S., Framingham Heart Program, Mass.; part time student— Epidemiology. Wife: Carmel Leah; children: Sarah Lee Elizabeth, 6; Vanessa Anne, 4½.

RICHARD ARLEN TJALMA—1667 Melrose Avenue, East Lansing, Mich.; B.S., Michigan State University, 1950; D.V.M., Michigan State University, 1954; Chief, Epizootiology Section, National Cancer Institute, U.S.P.H.S.; full time student — Epidemiology; next position: same as above. Wife: Ruth.

MAUREEN KATHERINE MOLLOY — 107 Jersey Street, Boston, Mass.; B.A., Barnard College, 1953; M.D., State University of New York, 1957; S.M.Hyg., Harvard University, 1964; resident — orthopedic surgery, Children's Hospital, Boston, Mass.; full time special student—Epidemiology; future plans: research fellow, Dept. Epidem., HSPH.

MANNING FEINLEIB — 248 Grove Street, Auburndale, Mass.; A.B., Cornell University, 1956; M.D., S.U.N.Y. Downstate Medical Center, 1961; M.P.H., Harvard University, 1963; associate registrar, Mass. Tumor Registry; full time student — Epidemiology and Biostatistics. Wife: Marcia; child: Richard, 6 mo.

JOSEPH FRANCIS FRAUMENI, JR. — 207 Park Drive, Boston, Mass.; A.B., Harvard University, 1954; M.D., Duke University, 1958; medical officer, National Cancer Inst., U.S.P.H.S., Bethesda, Md.; full time student—Epidemiology; future plans: continue at the National Institutes.

LOWELL W. SMITH — 2420 11th Avenue, Canyon, Tex.; B.S., West Texas State University, 1953; D.D.S., University of Texas, 1957; Staff investigator, Periodontal Disease Section, U.S.P.H.S.; full time student—Epidemiology; future career plans: continue in same position as above. Wife: Gloria Jean; children: Randy, 10; Patty, 6; Ricky, 5; Cheryl, 4.

CHARLES NEAVE—203 Park Drive, Boston, Mass.; A.B., Yale University, 1954; M.D., Columbia University, 1958; M.P.H., Columbia University, 1962; Lt. Commander—Med. Corp., U.S. Navy, Taipei, Taiwan; full time student—Epidemiology; future position: work in epidemiologic research overseas. Wife: Mary T. (Kim); children: Joe, 5; Andy, 3; Betsy, 3; Kate, 1½.

TOMIO HIROHATA—14-3, Takamiya Honmi-nami-Machi, Fukuoka City, Fukuoka-ken, Japan; M.D., Kyushu University, 1960; instructor, Dept. of Public Health, Sch. of Med., Kyushu Univ., Japan; full time student—Epidemiology. Wife: Itsuyo.

Yuling Li
Scott Allen
Kathleen Hawkins

David Nitzberg
Charles Buncher
James Pearson
Judith Shapiro
Raymond Neff

YULING LI — 33 Egmont Street, Brookline, Mass.; B.A., Wellesley College, 1962; Research Ass't, Harvard Medical School; part time student Biostatistics.

SCOTT INGRAM ALLEN — Brighton, Mass.; B.A., Pomona College, 1955; M.D., Yale University, 1959; M.P.H., University of Michigan, 1961; research fellow, Mass. General Hospital; full time student — Biostatistics. Wife: Edith; child: Donald.

KATHLEEN HAWKINS — 5225 Hutchison, Montreal, Quebec, Canada; A.B., Marianapolis College, 1957; M.D.C.M., McGill University, 1961; M.P.H., Harvard University, 1964; resident, Internal Medicine, New England Deaconess Hospital; part time student—Epidemiology; future plans: go to E.I.S. at Communicable Disease Center, Atlanta, Ga.

RAYMOND KENNETH NEFF — 81 Stonelea Place, New Rochelle, N.Y.; A.B., Dartmouth College, 1964; part time student—Biostatistics.

CHARLES RALPH BUNCHER — 5 Colliston Road, Brookline, Mass.; S.B., M.I.T., 1960; S.M. Hyg., Harvard University, 1964; full time student—Biostatistics; future plans: Harvard. Wife: Lois.

JAMES CLARK GRAHAM PEARSON—2 Mid Road, Dunde, Scotland; B.S., University of St. Andrews, 1962 (Scotland); Lecturer, Med. Statistics, Queen's College, Dundee, Scotland; full time student—Biostatistics.

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DAVID MORRIS NITZBERG — 22 Stimson Avenue, Lexington, Mass.; A.B., Columbia University, 1956; M.Sc., Ohio State University, 1957; S.M.Hyg., Harvard University, 1963; Mathematician, Institute of Naval Studies, Cambridge, Mass.; full time student — Biostatistics. Future plans: Completion of Doctoral program at HSPH. Wife: Roslyn; children: Michael, 7; Steven, 4.

GEORGE RICHARD BLUMENSCHEIN — New York, N.Y.; B.A., Yale University, 1959; M.D., Cornell University, 1963; Heart Disease Control Officer, U.S.P.H.S., Boston, Mass.; part time special student—Epidemiology and Biostatistics.

ANDREW GEORGE BRAUN — 1036 Beacon Street, Brookline, Mass.; B.A., Middlebury College, 1961; B.S., M.I.T., 1961; Div. of Sponored Research, M.I.T.; full time student—Radiological Health; future plans: doctorate. Wife: Helen.

ADOLPH JOSEPH BRINK — Pearl Terrace, Elma, N.Y.; B.A., University of Buffalo, 1958; M.D., University of Buffalo, 1962; resident—Internal Medicine, Millard Fillmore Hospital, Buffalo; full time student—Occupational Medicine. Wife: Barbara; child: Susan, 1½.

PETER THEODORE CHORAS — St. Thomas, Ontario, Canada; B.Sc., McGill University, 1957; M.D.C.M., McGill Medical School, 1959; resident, child psychiatry, Boston Univ. Med. Sch.; full time student—Epidemiology.

ROGER RALPH CONNELLY — 34 Clover Lane, Mason City, Iowa; B.S., Iowa State University, 1958; S.M.Hyg., Harvard University, 1964; statistician, Nat. Cancer Inst., NIH, Bethesda, Md.; full time student—Biostatistics and Epidemiology. Wife: Shirley; child: Lorraine, 2.

ALLEN L. CUDWORTH—Framingham, Mass.; B.S., University of Alabama, 1949; M.S., M.I.T., 1952; Dir. of Research, Liberty Mutual Insurance Co., Boston, Mass.; full time student—Industrial Hygiene. Wife: Cynthia; children: Ann, 9; Lindsay, 8; James, 4.

SHIRLEY CROUCH DE SIMONE — Cambridge, Mass.; B.A., University of Buffalo, 1956; M.A., University of Buffalo, 1962; Cancer Res. Scientist, Roswell Park Memorial Inst., Buffalo, N.Y.; full time student — Nutrition. Husband: John.

WILLIAM ROGER JOBIN — 7 Philip Lane, Foxboro, Mass.; S.B., M.I.T., 1959; S.M., M.I.T., 1961; S.M.Hyg., Harvard University, 1964; engineer, U.S.P.H.S., San Juan Puerto Rico; full time student — Tropical Public Health; career plans: tropical public health. Wife: Sara F.; children: Maria, 3; Andrew, 1 mo.

OSCAR KURREN—Winchester, Mass.; M.S.W.; Doctoral Candidate, Florence Hellek School, Brandeis University; part time student — Public Health Practice.

VERN LEE SCHRAMM — Howard, S.D.; B.S., South Dakota State College, 1963; full time student—Nutrition; future plans: work for doctorate. Wife: Donna; child: Julie Lee, 3 mo.

ROBERT D. LYNCH — 19 Whitman Street, Dorchester, Mass.; A.B., Northeastern University, 1964; Technician, New Eng. Deaconess Hospital, Boston, Mass.; full time student—Nutrition. Wife: Mary C.; child: Richard D., 10 mo.

HELEN ZARSKY REINHERZ — Malden, Mass.; A.B., Wheaton College, 1944; M.S. Simmons College, 1946; M.S.Hyg., Harvard University, 1962; Consultant, Social Work, Harvard Study Student Vol., Metropolitan State Hospital, Waltham, Mass.; full time student — Public Health Practice. Husband: Samuel; child: Ellis, 14½.

WILLIAM SCOTTIE RUNYAN — 199 Park Drive, Boston, Mass.; B.S., University of Idaho, 1960; M.S., University of Idaho, 1962; full time student—Nutrition; Research Ass't. Harvard University. Wife: Thora C.; child: Laura, 3.

LAURETTA deSa — 1691 Commonwealth Ave., Brighton, Mass.; I.Sc., St. Joseph's College, Pakistan, 1959; B.S., D.J. Science College, Pakistan, 1961; M.S., Boston College, 1964. Part time student—Tropical Public Health. Previous positions: Teacher, Karachi Grammar School, 1961; Teaching Assistant and Research, Associate, Boston College, 1962-present.

PHILIP La TORRE — 95 Spring Street, Wakefield, Mass.; S.B., Northeastern University, 1952; S.M., Harvard University, 1954; Chief, Ind. and Safety, Watertown Arsenal, Watertown, Mass.; part time special student—Radiological Health. Wife: Margaret; children: Philip, 7; David, 5.

LYLE CONRAD
Treasurer

JOHN DOUGHERTY
Vice-President

GRO BRUNDTLAND
Secretary

CLASS OFFICERS

GEORGE ADEYEMI ADEMOLA
President

CURRICULUM COMMITTEE

The Goal: Greater Student Participation

SHORTLY after their election, the Class Officers became aware of strong class sentiment for the organization of a committee for curriculum evaluation.

In the face of this movement, the officers reflected on the composition and experience of the class and its relationship with the faculty. Our classmates appeared to be well qualified to express their views regarding the educational process, particularly so, since most of them had successful experience in some area of public health and had arrived in Boston with definite educational goals.

This is in contrast to the reported trend toward younger candidates for degrees in public health. In our situation, the class appreciated the contribution by those with public health experience.

Finally, by participation with the School in curriculum evaluation, the Class Officers hoped to see the students contribute to an evolutionary change in the curriculum. Such a method would help keep the School in equilibrium with change in public health and, hopefully, anticipate requirements in teaching.

A committee was created with the approval of the Dean and began its work with a review of the curricula of other schools of public health. Next, a poll was taken to determine class opinions regarding their education over the first three quarters. The poll revealed wide differences in student needs in various programs.

The most significant focus of opinion lay in the area of the fredom of the student to participate creatively in his educational process, both in selecting his courses with few restrictions and in the classroom itself. There, it was felt, the educational process would be more effective if the student achieved true participation in seminars and discussion groups.

At the time of this writing, meetings are planned to reconcile these forces with the resources of the faculty and the responsibility of the School and its graduates to the community. At such an advanced level of study, we should not lose sight of the ancient concept of the university in which students and teachers, as partners, would work together in the exploration of public health.

Front row—Len Sagan, Chairman John Dougherty, Joan Altekruse. *Rear*—Jim Steere, Art Jacobs.

Art Jacobs, Johanna Dwyer, Chairman Gerry Renthal, Connie Conrad, Len Sagan.

Forum Committee

Dr. Harlem Sets International Tone

DURING the school year the Forum Committee sponsored a series of speakers on subjects of intellectual and professional interest to the class. The informal nature of the meetings enhanced their value and interest, a question period following each speaker's presentation allowing for a discussion and exchange of ideas which was often quite stimulating. Refreshments were provided by the Social Committee at the end of each meeting making it a social as wll as an intellectual event.

Our series began auspiciously on November 27 with a talk by Dr. Gudmund Harlem, Norwegian Minister of Defense, formerly Minister of Health. Dr. Harlem spoke on the development and organization of health and welfare services in Norway, a subject with which he was intimately involved during his tenure as Health Minister.

On aJnuary 6, Dr. James Goddard, Assistant Surgeon General and Chief of the Communicable Disease Center in Atlanta, Georgia, spoke on the Communicable Disease Center as an international resource and gave us some interesting insights how deply a foerigner to this culture — as myinto some of the major problems and researrh areas in communicable disease.

On February 23 Dr. Jerome Peterson, Regional Health Director for Western Massachusetts, formerly Chief of the Public Health Services Division, World Health Organization, spoke to us on programs and problems of the World Health Organization. His remarks stimulated a lively discussion in the audience regarding WHO policies.

Additional speakers who were scheduled but had not yet spoken at the time the Yearbook went to press were:

March 17 — Dr. Roger Revelle, Richard Saltonstall Professor of Population Policy and Director of the Center for Population Studies.

April 21 — Dr. Walsh McDermott, Professor of Public Health and Preventive Medicine, Cor-

Our Desert Correspondent Speaks:

After All We Still Have The Same Problems

By Abdul Rahmann Abdulla Al-Awadi

To me as a Kuwaiti, an Arab from Kuwait, that desert post of affluency and opportunities, most of the widely discussed issues of the American life are very familiar.

The similarity has made me very inteersted in many aspects of American life. Some of the generalizations that I may dare to make reflect self — dares to probe. Right from the first few days of my arrival to Boston I felt an urge to assign myself to such an impossible task.

My immediate impression was that something very basic was taking place in American life. I could simply feel this. It was conveyed to me through all the different channels of communication available to me. No matter where I looked, I became more convinced that some great change was simmering deep in this life. This was similar to the feeling I had when I went back to Kuwait after finishing my studies abroad. It seemed to me that whenever a great social change or readjustment is about to take place, such a unique feeling is sensed by any person who is interested in these changes.

Besides, this big change made its presence felt in all the big issues that confronted the American nation during the period I have stayed here. This was very clear in the presidential election issues. It was beautifully portrayed to us during the different lectures we had about the role of organized medicine in shaping the future medical plans for certain segments of the American people. The press news and editorials, the worthwhile programs on the T.V. or the radio, and the majority of the political speeches were in one way or another echoing its voice. Finally, the civil rights movement march in Selma, Alabama, was the real personification of this great change.

All these events were pointing to one major issue. This was the head-on collision which is taking place between that most cherished concept of the individual and the old-established institution of human culture, i.e., the community. The outcome of this great collision will make the greatest impression over human history.

If we now contrast this to the situation in the developing countries, we notice that the approach is completely different. There the change is starting with the community. The individual comes next and most of the time he might even be forgotten. The reason for this approach is the urgency with which the needs of our dveloping countries are to be satisfied. We do not have too much time to wait. The world has already passed us by. To depend on the individual and his own initiatives will not help us to catch up with it.

Yearbook Committee

Co-Chairman Dave Danielson, Chairman Bob Morgan,
Bob Moroney, Abdul Al-Awadi, Paul Chen.

(*Continued from previous page*)

Of course, the two approaches are basically different. The distinction between them should be clarified. In clarifying this basic difference our school can play a great role. It can contribute to this by actually developing a special course dealing with international issues. Some may say that such a course is more for a school of international relations than for a public health school as ours. I have to disagree with them and remind them that such narrowmindedness seems to have ben the major reason for the wide gulf existing between the public health approach to the major issues in health and the other branches of health. I believe that in discussing such international issues we shall all find better insight into our problems. Our school should reorient its student toward the more basic issues that are threatening the health of many deprived millions of the world today. It is not enough to make mere fact statements about them. These must be discussed exhaustively and debated upon frankly. It does not matter whether it is the Appalachia problem or the famine in the dark jungles of Africa. The main issue behind these is that they form a continuum which needs a practically similar solution.

So it is clear that the real issues confronting the developing countries and the developed ones are basically the same. The foreign students, I believe, very much interested to learn how a prosperous country is going about solving its major problem. They are at the same time very willing to share their experiences with their colleagues with regards to their problems. For the better part of the year the flow has been in one direction. They must be given more chance to express themselves. I assure you they have a great deal to tell.

Cliche Expert (on camel) takes high-level view of program planning.

The Cliche Expert Speaks on Public Health

We thought that recent graduates in Public Health should not go into the field without a final sharpening of this most important tool of the trade—the jargon. So we asked the old C.E. to come in and up-date us with a quick run-down. Here is what he told us:

WELL now, let's step back and take a broad over-view to see what we've covered this past year.

"Let's face it, each of you in the final analysis is going to have his day in court, whether it be at the local level or at the central office. And one of the key things in terms of doing your home-work, before you put the budget to bed, is the ongoing problem which you must think through in a given program in order to delineate the realistic needs.

"In taking a hard-nosed approach to determine top-level priorities and weighing the pros and cons, you will be better able to garner support for earmarked funds and touch upon the key areas if you use a real good ad hoc committee headed up by a capable administrator who knows the ropes and rules of the game at the middle-level manpower level.

"Furthermore you've got to sit down and with objective yardsticks step by step delegate responsibility to avoid gaps in planning which may lead to a backlash of unfulfilled demands. All of this points up the first rate opportunity for self-education in the present-day challenge to upgrade services to supply broad coverage in the check-list of essential needs at the periphery."

INTERNATIONAL HOUSE

A TALL Nigerian doctor stood in the wood-panelled Gund Room of the Henry Lee Shattuck International House on Park Drive. His colorful costume blended with an exotic display of artifacts from around the world. His name is Dr. Ademola, a student at the Harvard School of Public Health, and he was addressing the Harvard School of Public Health Visiting Committee. These gentlement had just been served an international buffet prepared by the wives of students who live in the Shattuck International House. Dr. Ademola welcomed the Visiting Committee on behalf of the Class of '65 and of the residents who live in Shattuck International House.

"This is truly our home away from home," he said. And he described friendship between neighbors from many nations who fellowship together here. Of special significance was the fact that in the audience sat Dr. and Mrs. Snyder and others whose vision, foresight, and gifts have made this unique apartment complex possible. This year International House served as home to doctors and their families from India, Africa, the Middle East, the Far East, North and South America, and Europe, more than 15 nations being represented.

The year was highlighted by such activities as pot-luck suppers, international cooking demonstrations, slide shows, and talent shows, in addition to activities sponsored by the Class of '65.

Active committees also made a major contribution. The Music Committee, headed by John Gardner, and the Library Committee, headed by Mrs. John Yoder, brought cultural enrichment to International House by keeping the TV, hi-fi set, and library in order. Important new additions were made to the record selection and library book collection, as requested by residents of the house. The Health and Safety Committee, headed by Mr. Varner, was one of the most active committees of the year, improving fire extinguishing equipment, clarifying safety precautions and emergency instructions for all residents. Fire drills were sponsored during the year. Under the direction of Dr. Pathak of India, the children's activities carried on smoothly. This committee had subcommittees responsible for the nursery school, the playroom, the playground, and special parties. Both parents and children enjoyed the special projects for the children.

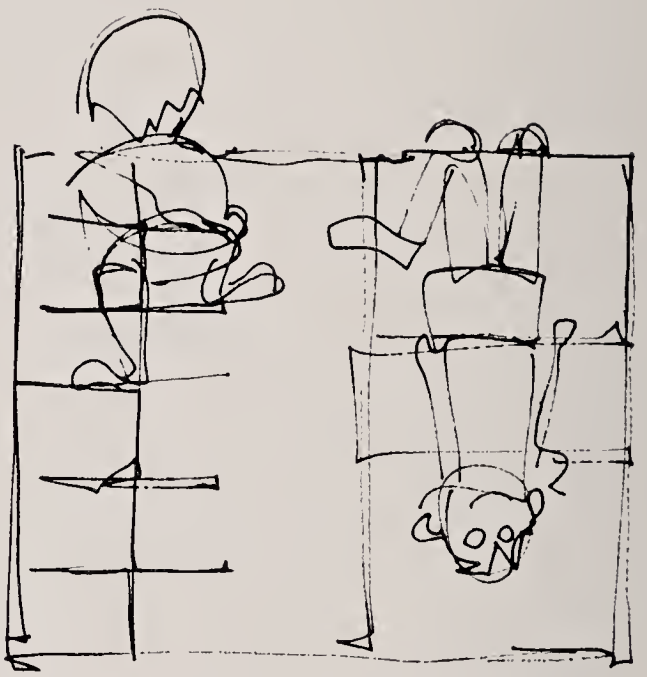
DR. GETCHEN BERGGREN,
Chairman, House Committee

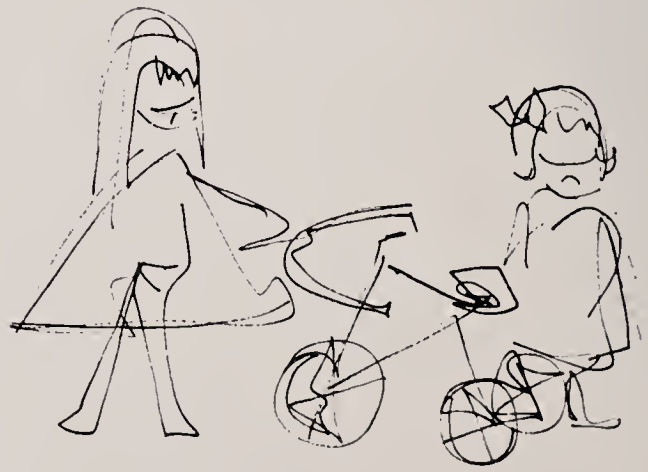
Social Committee

Paul Chen, Chairman Don Frederickson, Abdul Al-Awadi, Gretchen Berggren, Debhanon Muangman.

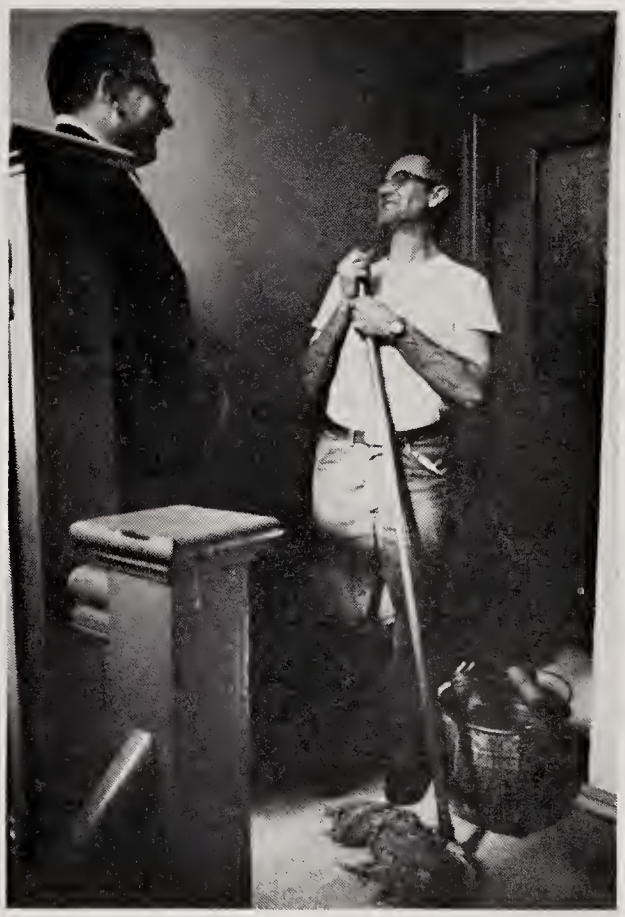
We Sang and Feasted

...And The Children Shall Lead Them...





The Main Points



"DR. FROBISHER . . . ?"

I looked up from the drinking fountain, where I was mixing a cup of coffee.

"Dr. Frobisher, will you please summarize the main points?"

The voice was familiar. But I didn't see anyone else around in the room. The year was over, and the students had all returned to their homes.

"Dr. Frobisher? Is he here?"

"Yes, Sir. Yes. The main points. Well, we have the vectors. They're very important. And the Lippes loops. And the marginal costs of hospital care."

"Yes, Dr. Frobisher, I'd agree with you that these are of interest. But hardly the main points."

"No, Sir. Of course not. What I was going to say was that these lead us naturally into such considerations as the random sample. And the prevalence of incidence. And the Slutzky-Yule effect. I remember that one. And the control of chronic obesity. I think they all should be mentioned."

"You're taking a broad approach to the question, Dr. Frobisher. But I don't think we have yet gotten to the main points."

"No, Sir. Well, one might consider how one would deal with a case of bifurcated dichotomy. Or confounded extraneous variable. Or advanced caffeinism. Or administrative gout."

"Dr. Frobisher . . ."

"We mustn't forget the smog count. And the normal distribution."

"Ah! What you're saying, Dr. Frobisher, is that the normal distribution is one of the main points?"

"Yes, Sir. A very main point. That's what I was leading up to all the while."

"I'd agree with you, Dr. Frobisher. Tell us about the normal distribution."

"Well, it's a . . . It's an . . . It's a . . . er . . . curve."

"A curve?"

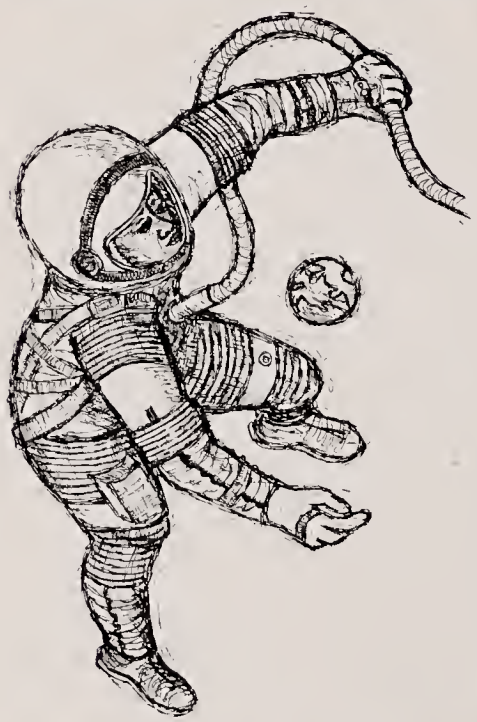
"No, Sir. Not exactly a curve. More like a . . . er . . . distribution."

"Exactly, Dr. Frobisher. A distribution of what?"

"Well, it might be a distribution of people."

"That's a promising approach. Give us an example."

"Well, like the students in the school here. Normally, they might be distributed . . ."



SPEAK UP, DR. FROBISHER

(Continued from previous page)

"Where might they be distributed?"

"Well, right here in this room, for one place. Drinking coffee. Or trying to catch up on their reading, you know, in case they get asked a question in class. Or just talking. But they're gone now. The curve has run out to zero. They're scattered all over the world. In Nigeria, California, Malaya—all the places. Otherwise you might hear them now, rushing in late . . ."

"Where else might they be?"

"Well, there was always the usual hubbub at International House. Bicycles in the basement, children playing. And the huge crowds in the Music Room . . ."

"Listening to the records?"

"No, cramming for the TPH exam. Or gathering for the parties. Singing at Christmas, eating all those different foods. Fufu, and curry, and mashboos . . ."

"Where does mashboos come from, Dr. Frobisher?"

"Kuwait."

"Right. Now I think you're getting the hang of it."

"Yes, Sir. And the Aviation Medicine people, with their strange foreign language. You know, if the X-bar fails to rotate at 12,000 feet then you're really in trouble."

"How's that again?"

"And the Public Health Practice people. They walk up to some perfectly nice guy and start asking him to evaluate his program."

"Well, yes . . ."

"But most of all, I remember the times we spent in this room. Eating lunch. Trying to make coffee for 25 people with only three paper cups. I think that's how it is in Public Health. We're lucky to have such a good group of people, because otherwise it would be pretty rough. Somehow, we always manage to get coffee."

"What you're trying to say, Dr. Frobisher, is that for one year in one place, a very unusual and a very wonderful collection of people were snatched up from here and there in the world and brought together, in a way that will never be repeated for us again in just this manner. And though many of us probably will never meet again, we will carry the memory of this year with us. And our lives will never be the same because of it."

Yes, I had to admit, that was exactly what I was trying to say.

...*Our Special Thanks*...

CLAIRE WASSERBOEHR—Yearbook Secretary, for typing manuscripts, giving advice on procedural matters, and serving as chief morale booster.

Miss Claire Wasserboehr

JUDITH DANIELSON — Art Chairman, for illustrating so attractively the departmental section of the Yearbook.

TED POLUMBAUM — for quickly and artistically capturing the class in candid photographs.

GAIL STOCKER — for help in locating photographs and cheerful advice on finances and business arrangements.

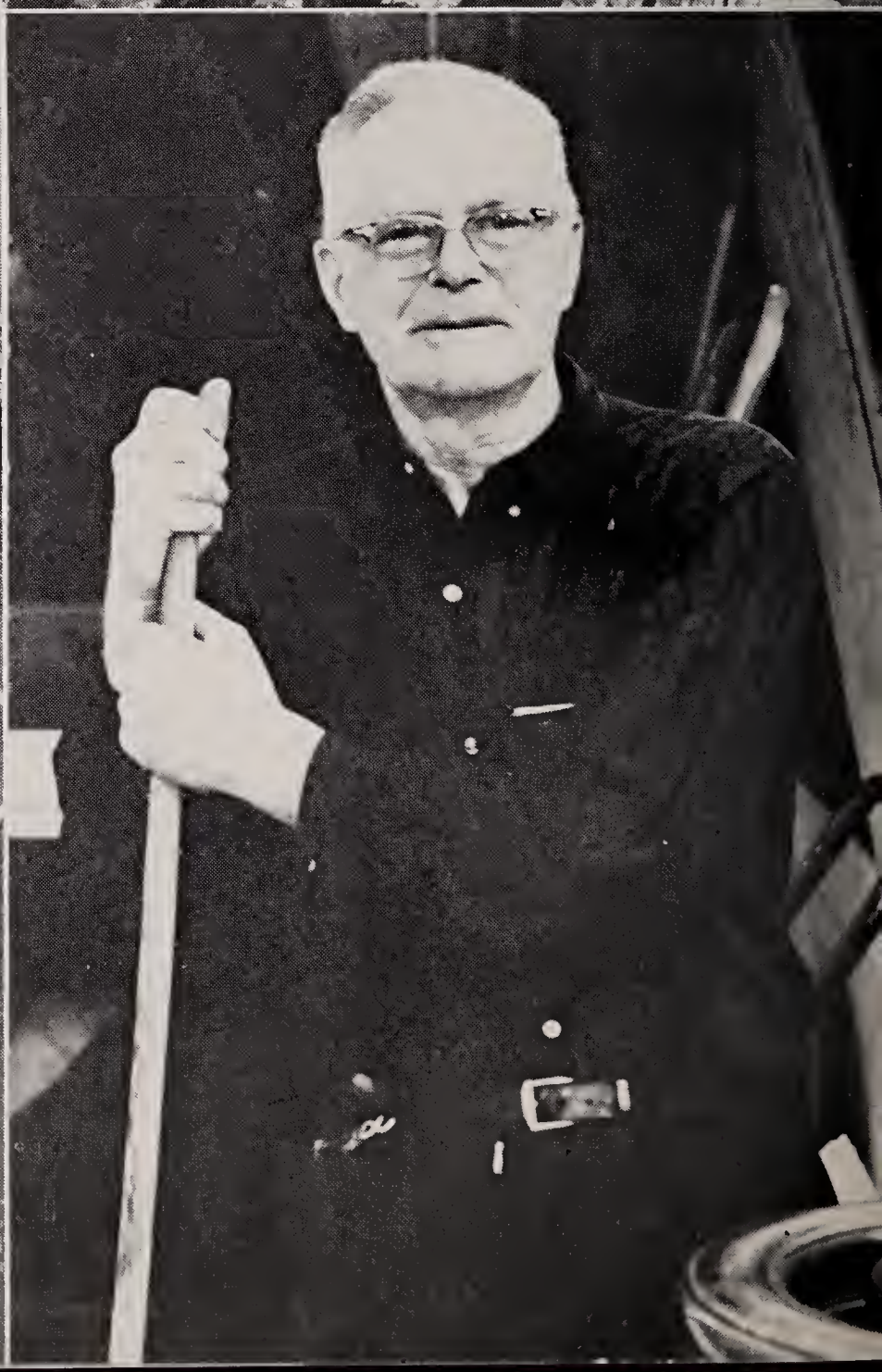
INEZ ALVAREZ—for providing the delightful and whimsical sketches of children at play in International House.

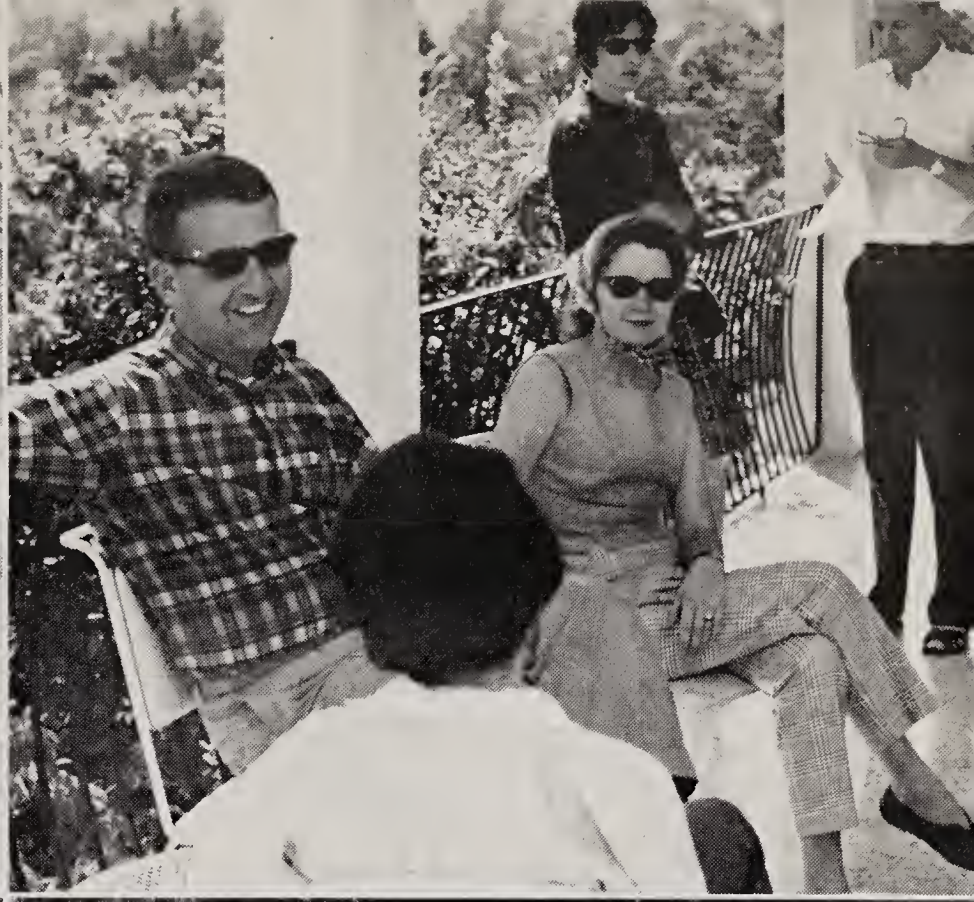
Miss Betty Ann Stephens

BETTY ANN STEPHENS — for help in coordinating communications between the Committee and the outside world.

Miss Gail Stocker

CAROLYN PETERS — for drawing the maps which appear upon the inside covers depicting the broad distribution of students.






EXIT


EXIT

VITAL STATISTICS

OUR countries of origin are shown in the map, drawn for us by Carolyn Peters, which appears inside the front and back covers of the book. Shaded areas represent the native countries of Class Members, darkly outlined areas the countries in which Class Members have worked. Our origins, by country, are as follows:

Canada	5	Japan	1	Philippines	2
China	2	Korea	1	Scotland	1
England	2	Kuwait	1	Thailand	1
France	1	Nigeria	2	United States	108
Haiti	1	Norway	1		
Israel	1	Pakistan	2	Total	132

The Class includes 99 men and 33 women. One other vital statistic which might be of interest is a breakdown of our occupational backgrounds. We have representatives of twenty disciplines:

Physicians	76	Chemists	2
Statisticians	9	Industrial Hygienists	2
Engineers	7	Nurses	2
Social Workers	5	Radiological Hygienists	2
Veterinarians	5	Health Administrators	1
Nutritionists	4	Home Economists	1
Biochemists	3	Microbiologists	1
Engineers	3	Psychologists	1
Health Educators	3	Sanitary Chemists	1
Dentists	2	Sociologists	1

And so we rest from our labors. But only briefly. For Public Health is still with us, and there always will be another community to be organized, another baby to be born, another well to be dug, another smog to be analyzed, another budget to be put to bed. May we meet again often, as we pursue our duties around the world!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